City of Whittier

Whittier Comprehensive Plan

1995





1995

WHITTIER

COMPREHENSIVE

PLAN

THE CITY OF WHITTIER

Gateway to Western Prince William Sound

TO:

Friends of Whittier

FROM:

Ben Butler, Mayor, City of Whittier Ben Butle

SUBJECT:

1995 City of Whittier Comprehensive Plan

DATE:

August 1, 1995

It gives me great pleasure to introduce the 1995 revision to the City of Whittier Comprehensive Plan. This document follows our earlier plan completed in 1990, and offers the current thinking of City residents about the future of our community in anticipation of new access from Portage provided by the State of Alaska through the Whittier Access Project, which is now in the final stages of completion.

The City of Whittier is a small community with a broad vision for its future. We believe that new access will allow the City to contribute to the economic health and vitality of all its neighbors in Prince William Sound and Southcentral Alaska. We hope you will carefully review this plan and come to share our vision for the City's economic future, so that Whittier can build upon its location in Prince William Sound for enhanced recreation, tourism and other commercial opportunities.

On behalf of the City Council, I wish to express our thanks to Gary Williams, former City Manager, who was the principal author of this document. I also thank Chris Overbeck, former Mayor, and Jim Barnett, City Attorney, for their efforts in completing the final editing of this document and helping in its distribution. Finally, the City is indebted to the Anchorage office of HDR Engineering, Inc., for providing the attractive photographs, maps and charts.

We hope this revised plan will stimulate continuing interest in the future of our small community among residents and visitors alike. Thanks in advance for your careful review and consideration of our vision for Whittier and western Prince William Sound.

CITY OF WHITTIER 1995 COMPREHENSIVE PLAN

CITY COUNCIL

Ben Butler, Mayor
Chris Overbeck, Mayor (1994-95)
Dan McGauhey, Vice-Mayor
William Coumbe
Robin Gaboury
Anne Poss
Richard Singsaas

Planning Commission

Ben Butler, Chairman Randall Burnham Don Eller Philip Johnston Ed Long Chou "Joe" Shen

George Weamire

Port and Harbor Commission

Gordon "Pete" Heddell, Chairman Scott Walther, Chairman (1994-95) Marilynn Heddell Mike Johnston Gerald Protzman Don Stevens

CITY ADMINISTRATION

David Morgan, Acting City Manager/Finance Director Gary Williams, City Manager (1992-95) Debra Burnham, City Clerk Jim Barnett, City Attorney

Public Safety

Richard "Jack" Powell, Marshall Dan Jewel, Sergeant Arthur T. Dunn, Patrolman Charlene Arneson, EMS Director Alberto Caballero, Fire Chief

Small Boat Harbor

Richard Amerman, Harbormaster Brendann Krol Fred Waltman Ted Sayen

Public Works

Richard Amerman, Director Ben Leniz

Larry Roberts

Medical Clinic

Dr. Tim Scheffel

Kathryn Heflin, Clinic Clerk

SPECIAL THANKS TO ALL THE CITIZENS OF WHITTIER WHO HAVE DEDICATED THEIR TIME AND EFFORT TOWARD THE COMPLETION OF THIS DOCUMENT.

EXECUTIVE SUMMARY

The 1995 City of Whittier Comprehensive Plan is based on the information and statistics presented in the 1990 Plan, and has been developed pursuant to a City ordinance requiring that it be updated on a regular basis.

A Comprehensive Plan is not an end in itself but the beginning point in an on-going planning process. Subsequent planning, zoning and economic development initiatives will be guided by the community through the public hearing and Ordinance process.

The major change in the past few years has been reduced municipal revenues, a shift to tourism and recreation in support of economic activity in the community, and the substantial prospects of community change brought about by the potential construction of improved rail or new road access to the community from Portage.

Chapters I to VIII of this Plan provide the same titles as the prior plan, and offer updated statistical information and an analysis of key issues affecting Whittier, including its people, housing, community services, transportation, economy and land status. In each chapter, information obtained about new access and its impacts on the community has been obtained from current sources considering the Whittier Access Project and its environmental impact statement. The chapter on transportation gives insight into the City Council's preference for the least expensive road access alternative.

The conclusion from the information contained in the first eight chapters is that, if new access is secured, the City will face significant changes requiring careful planning in anticipation of expanded tourism and recreation visitation.

Chapter IX of the Plan is a statement about the goals and policies of the community. Although these goals and policies have not changed significantly since 1990, they reflect the community's desire to see improved access, and its plans to respond aggressively with new facilities and economic activities to meet the demands of increased visitation, particularly at the harbor. It also suggests policies for providing growth outside of the tourism and recreation arena, new amenities for City residents, and suggestions for future local governance.

In this Comprehensive Plan, a new Chapter X has been added. It provides a four-phase "implementation" concept and future land use projection map, which will enable the City Council and Administration to focus on the key issues that will ensure improved access is secured and that the City has facilities in place at the time improved access from Portage is completed to maximize the opportunity to capture the new visitation to the benefit of the local economy. This chapter also provides information about the community's plans to respond to new access, and encourage the positive economic opportunities that will result from that access.

Phase I of the implementation Plan for the community, as found in Chapter X, identifies the City's immediate, highest priorities to implement the overall Plan as follows:

1-Insist on Improved Access from Portage

a) Continue advocacy within and outside the City

2-Plan for Initial Town Core Redevelopment

- a) Establish partnership with Alaska Railroad
- b) Resolve long standing tideland dispute in the harbor
- c) Rezone town core lands consistent with this Comprehensive Plan
- d) Secure ownership of City's 600 acre land entitlement to the east of the town core

3-Determine Feasibility of Key Town Core Projects

- a) Expansion of the Small Boat Harbor
- b) New community sewer system
- c) Essential road network to support initial development
- d) Moving the ARRC rail lines from the middle of the town core
- e) Upland Recreation
- f) Renovation of the Marginal Wharf and the Marginal Wharf Building

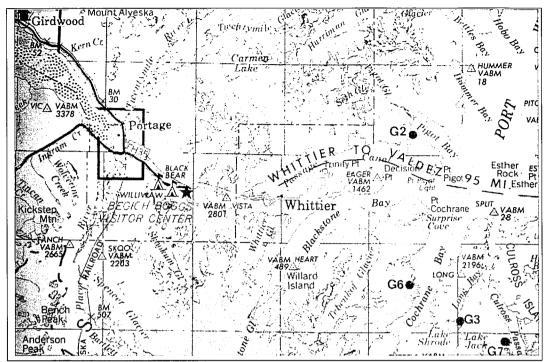
Subsequent phases of the Plan suggest further development of the town core, including commercial and residential development, and the initial steps toward community expansion beyond this area to the Head of the Bay and along the road and into Shotgun Cove.

It is required that a revision to the Plan will be accomplished every two years. If improved access is secured the initial feasibility projects identified in this Plan will begin, and the project implementation will follow.

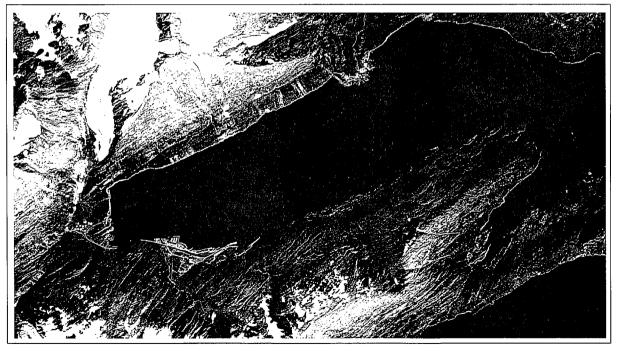
Table of Contents

Chapter I	Introduction and Natural Settting1-1
A.	Contents of this Plan1-1
В.	Purpose of the Plan1-2
C.	Whittier's Natural Setting
Chapter II	People of Whittier2-1
A.	Population2-1
В.	Community Character2-3
C.	Employement
Chapter III	Housing3-1
A.	Inventory
B.	Costs
C.	Housing Demand
Chapter IV	Community Services4-1
Α.	The City of Whittier4-1
В.	Municipal Revenues and Expenses4-3
C.	Municipal Services4-4
D.	Education4-13
E.	Private Utility Services
Chapter V	Transportation5-1
- A.	Railroad5-1
В.	Whittier Access Project5-3
C.	Ferry Service and Other Marine Access5-7
D.	Airport5-9
E.	Small Boat Harbor5-10
F.	Petroleum-Oil-Lubricant (POL) Line
Chapter VI	Current Economy and Potential Growth6-1
	Recreation/Tourism 6-1
В.	Fishing6-12
C.	Marine Services6-14
	Government6-15
E.	General Commerical Services6-17
F.	Summary

Chapter VII	Land Ownership, Use and Management	7-1
A.	Land Ownership	7-1
В.	Present Land Use	7-5
C.	Future Land Use	7-8
D.	Land Use Regulation	7-12
E.	Other Land Management Tools	7-13
Chapter VIII	Other Plans and Recommendations	8-1
A.	Captial Improvements Program	8-1
B.	Master/Land Use Plan for Small Boat Harbor	8-2
C.	Tranportation Plan	8-3
D.	Coastal Management Program	8-3
E.	Government Options	8-4
F.	Prince William Sound Area Plan	8-6
G.	Alaska Marine Highway Plan	8-6
Chapter IX	Community Goals and Policies	9-1
A.	Community Growth	9-1
B.	Access/Transportation	9-2
C.	Port and Harbor Development	9-4
D.	Economic Development	9-5
E.	Tourism	9-7
F.	Housing/Residential	
G.	Social Services/Health Care	9-8
H.	Community Facilities/Utilities	9-9
I.	Recreation	9-10
J.	Local Government	9-12
Chanton V	Dian Implementation	
Chapter X	Plan Implementation Phase One - Secure New Access and Undertake	
A.	Town Core Initial Development Phase Planning	10.1
ъ	Phase Two - Construction of all Elements of the	10-1
ъ.	Initial Development Phase of the Town Core	10.2
C	Phase Three - Construction of the Second Development	10-3
C.	Phase of the Town Core and Plan Head of the Bay and	
	Shotgun Cove Projects	10.4
D	Phase Four - Construction of Final Town Core	10-4
D.	Development Phases and Projects at Head of the Bay	
	and at Emerald Bay/Shotgun Cove	10.5
	and at Emeraid Day/Shotgun Cove	10-3
Appendix		
Appendix A.	1989 Community Survey Results	
	Miscellaneous Data	
	1994 Community Survey Results	
C.	22.2	
Bibliography		



USGS Topographic Map of Whittier and Its Surroundings



High Altitude Photo of Whittier City Limits

Chapter I Introduction and Natural Setting

The City of Whittier is at the head of Passage Canal, a fjord of Western Prince William Sound. Whittier is approximately 47 air miles (62 miles by road and rail shuttle) southeast of Anchorage. The nearest major communities to Whittier are Anchorage, Cordova (110 miles to the east), Valdez (97 miles to the northeast), and Seward (125 miles to the southwest). Whittier is a year round ice-free port and is a focal point for marine activity and freight transfer from sea train barge serving Southcentral Alaska. See the accompanying USGS topographic map.



The Whittier townsite lies on a fan-shaped delta on the south shore of Passage Canal. The delta, approximately a mile square, is bordered by Whittier Creek on the west and by a mountain ridge on the east. At the west end of Passage Canal is a delta, commonly known as "West Camp" or the "Head of the Bay," about one and one-half square miles in area. This delta is formed by creeks flowing from Portage Pass, Shakespeare Glacier and Learnard Glacier. These two deltas comprise the land area upon which the Whittier community infrastructure is presently located.

The city limits total 17 sections (17 square miles), and includes both deltas, most of Passage Canal, and undeveloped lands eastward to Shotgun Cove. Annexation of the Shotgun Cove area by the City on April 6, 1973 enlarged the City limits by 8 square miles. The city limits are portrayed in the attached High Altitude photo depiction.

Most communities have evolved through building and land improvement projects by individuals, private businesses, or public agencies. In Whittier's case, much of the community infrastructure is the result of various government projects, many of which were built by the U.S. Army during and in the years following World War II.

I. CONTENTS OF THIS PLAN

The first part of this plan presents an overview of the community in eight chapters. Presented here is an informational inventory of current development, characteristics and conditions in the City including new information made available from planners considering new access to Whittier. Additional information on specific topics can be found in the publications listed in the bibliography.

The ninth chapter describes the goals and policies of the City, particularly as they relate to the potential for new access to the community from Portage and the Southcentral Alaska road network. The final chapter proposes a specific plan for the development of Whittier beyond its

current status. The purpose of this chapter is to lay the foundation for a formal community plan in support of economic expansion, focusing on tourism and recreation opportunities.

II. PURPOSE OF THE PLAN

Whittier's elected and appointed officials and public agencies can use the data in this document to project and plan for the community's anticipated future needs, particularly as they respond to new access. Private individuals and corporations can also use this document to analyze areas of investment potential and as a background reference.

This comprehensive plan is not an end in itself, but is rather part of an ongoing planning process. The recommendations in this report are based on the first comprehensive plan for the City, which was completed in 1990 using information available in 1989 and projections to the year 1995. This updated plan uses more current information, and anticipates expected new development. The needs of the community may change again in the future, and residents and governmental bodies should continue to reassess how they want to direct the future growth of the City. According to Whittier Municipal Code the Comprehensive Plan must be reviewed every two years.

In reading this plan it is clear the development of improved access into Whittier will bring sweeping changes to the city. The influx of new people will mean a change in the existing social structure, including local government. When the road or other improved access is developed and as the tourism/recreation industry expands, the community should be mindful of the changes, development opportunities, and challenges it will bring.

The primary goals of the City of Whittier in the coming years are to insure the long term viability of the City through economic diversification and development of residential areas. The City will pursue these goals without sacrificing the quality of life in the area and it will work to serve its residents first.

III. WHITTIER'S NATURAL SETTING

A. GEOLOGY

The natural subsurface composition in the Whittier area consists primarily of slate and graywacke (a tight, non-porous, dark-colored sandstone containing angular grains and fragments of other rocks) of probably Cretaceous age, locally overlain by unconsolidated Quaternary deposits consisting of glacial moraine, reworked outwash and stream gravel, and artificial fill in the developed area.

Both the Whittier delta and the Head of the Bay are formed of unconsolidated deposits of outwash and stream gravel. Composition of the Whittier delta is largely course, subangular to sub-rounded gravel in matrix of course sand. The gravel's maximum depth is unknown, but it is at least 44 feet deep beneath the Begich Towers.

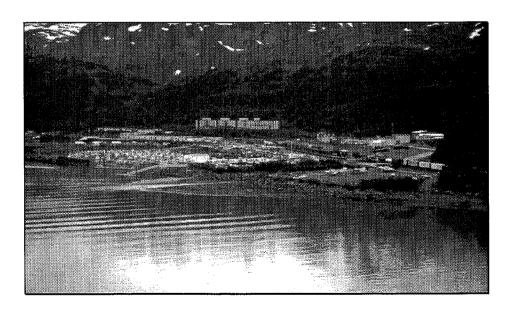
The sediments composing the Head of the Bay are similar to those of the Whittier delta. However, the outwash and stream deposits in the northern part of the delta are overlain by a moraine from the Learnard Glacier. The moraine that overlays the West Camp delta deposit consists largely of jumbled heaps and ridges of course angular blocks of slate and graywacke and their depth is unknown. Locally, patches of sand and gravel are interspersed with the coarse blocks.

Southcentral Alaska in general is seismically active. Nearly 7% of the world's annual earthquake energy originates in the Alaska seismic zone, placing the Cook Inlet region in seismic risk zone 4. This is the highest risk zone, defined as areas where major structural damage will occur. In 1964, this century's second strongest earthquake shook southcentral Alaska at a Richter Scale magnitude of 9.2. The epicenter was located in Unakwik Inlet in Prince William Sound, less than 64 kilometers (40 miles) northeast of Whittier.

In Whittier, earthquake damage was great. The earthquake and resulting waves killed 13 people and resulted in massive destruction of property. It caused a land subsidence of 1.6 meters (5.3 feet) at Whittier, terrestrial and submerged landslides, and snow avalanches.

B. TOPOGRAPHY

With the exception of the Whittier and West Camp deltas, the topography of the area generally rises abruptly from the shoreline at grades of 30% to 60%, to mountain altitudes ranging from 3500 to 4600 feet. Protrusions of bedrock and rock faces are numerous throughout the area.



Whittier town from the north, showing Whittier delta. In the foreground the small boat harbor and a departing train can be seen.

The Whittier delta, a small fan-shaped area, gradually increases in slope. The slope of the land around the Begich Towers, located at the southern end of this delta, is from 3% to 5%. The average slope in the West Camp delta is also less than 3%. The only other lands within the City limits that have relatively moderate slopes are near the coastline in the Shotgun Cove area, particularly around Emerald Bay and at the head of the Cove. The area's topography has and will continue to influence and limit the amount and type of growth that can occur in Whittier.

C. MARINE

Passage Canal is one of the most westerly of several long fjords comprising Prince William Sound. In the Whittier area, the canal averages about 1-1/2 miles in width and is over 600 feet deep. The tidal conditions in Passage Canal are similar to those of other recorded areas in Prince William Sound. Except at the delta areas, the water depth increases very rapidly from the shoreline. The diurnal (daily) tide range is 12.1 feet. The maximum elevations of low and high water occur during January and July with tides ranging from approximately -3.0 feet to +15.0 feet. The maximum tidal current in the Canal opposite Whittier Harbor is about 2 knots.

Despite the presence of several glaciers in the surrounding valleys, ice does not form in Passage Canal during the winter. Thin layers of ice form, however, on structures and facilities exposed to ocean spray. Although the port is ice-free, it is subject to strong winds, fog and heavy precipitation. Port approaches can be subject to seas which reach four to six feet during heavy weather.

D. CLIMATE

Whittier's geographical setting, on a relatively narrow fjord, surrounded by snow-capped mountains and glaciers, gives basis to its climate involving wind and weather common to both the coastal mountains and the open coast.

Whittier's proximity to Portage Pass has a major influence on wind. The Pass is a natural venturi, which accelerates winds, much like pinching off a garden hose accelerates water.

In January, mean temperature ranges from 30 to 19 degrees fahrenheit, with 14.3 inches of precipitation and 56.9 inches of this precipitation falling as snow. In July the mean temperature ranges are 62.40 to 49.10, and there are 12.47 inches of rain.

Winter snow accumulation can approach twelve feet on the ground during February or March. The maritime climate can mean quick changes from snow to rain and back again. Snow removal, snow load problems and severe icing are problems during the winter months. Snow accumulations can pose particular dangers to small boats moored at the City's harbor and buildings have been damaged due to accumulations of snow and water.

Annual snow fall estimated in excess of 12.7 meters (500 inches), high winds, and steep mountain slopes result in frequent avalanches within the area. Avalanches near the railroad tunnel portals have resulted in derailed trains, delayed rail service, damaged and destroyed facilities, buried equipment, and trapped individuals. Once, an avalanche at portal 5 resulted in a death. The tracks at portal 2 are adjacent to the runout zone of a major avalanche chute and could be affected by large slides. In addition, a portion of the south side of Passage Canal is exposed to surge waves generated by major avalanches originating from avalanche paths along the north shore of Passage Canal.

Weather service data is available on winds in Whittier, where they are known locally for their strength and duration. Generally winds in Whittier blow from Portage Pass out Passage Canal (SSW) or the opposite direction (NE). Winter winds, coming off the surrounding ice fields and glaciers are strong, gusty and vary in direction. At least five different wind vectors have been identified in the Whittier area. All have different velocities and duration factors relative to seasonal changes and geography of Passage Canal. The two strongest winds blow east and west respectively, along the axis of the Canal. The winds blow hardest when a steep pressure gradient exist between Prince William Sound and Cook Inlet. Winds ranging from 40 to 50 miles per hour are not uncommon during these conditions and may generate waves between four and six feet in the center of Passage Canal.

The wind vector with probably the greatest impact on the Whittier delta and developed areas is a south wind blowing off the Whittier Glacier. Its velocity is in the 30 to 50 miles per hour range and can blow for long periods of time. This wind can create snow drifts which cover downtown buildings, cars, and streets. On one occasion the wind has been strong enough to topple an open railroad boxcar. Outdoor activity during these periods is severely limited.

Additional insight on winds in the Whittier area is provided by a 1949 report by the U.S. Army Corps of Engineers on Shotgun Cove. The study team maintained anemometer readings for 172 consecutive days from January to June in 1949. The point of observation was on the southeast shore of the Cove about midway between the inland shoreline and the mouth of the Cove.

The observation team recorded the following wind speeds: periods of calm, 51.5 percent of the time; light winds, less than 15 m.p.h., 27.2 percent; and winds over 15 m.p.h. and up to 45 m.p.h., 21.3 percent. The prevailing winds for the period are recorded as being lengthwise of Shotgun Cove, WSW 24.1 percent and ENE 17.6 percent. In the opinion of local residents who frequent the area, Shotgun Cove is often subject to high winds from over the pass into Blackstone Bay.

E. FLORA AND SOILS

Ground cover in the area consists of a thin layer of topsoil over bedrock, covered with lichens and grasses. Wild flowers and high-bush blueberries are common in certain areas.

The predominant tree cover in the area is Sitka Spruce (80%) and Western Hemlock. Common dimensions of the trees are 14 inches or more in diameter and heights to 55 feet. Growth rates for trees in the fjords of Prince William Sound are very slow. Many trees in these areas take 50 years to reach a significant size. Regeneration is a slow (and haphazard) process on the steep slopes in the area. Scrub alder, blueberry and salmonberry bushes grow in the delta area, particularly where land has been cleared. Whittier is noted for the abundance and size of its berry crop, which attracts an increasing number of berry pickers each year.

The U.S. Forest Service has identified principal soil mapping units associated with the vegetative cover types in the area. The Coastal Management Plan contains a detail account of the various physical characteristics of the City.

F. FISH AND GAME

Prince William Sound, including waters adjacent to Whittier, has a variety of fish and other forms of sea life. The most common fish include sea bass, flounder, halibut and four of the five species of pacific salmon. Crab, shrimp and clams are also native to the area. Whales, porpoises, seals, sea otters and sea lions also can be seen in Passage Canal during certain periods of the year. Black bear, occasional wolf, coyote and mountain goats are the most predominant large land animals. Moose are occasionally seen near the tank farm, apparently entering through the railroad tunnel or over Portage Pass. Snowshoe hares, porcupines, beaver, otter, mink, marmots, squirrels, ptarmigan and weasel are common small animals.

Migratory birds such as geese, ducks and cranes use Portage Pass in crossing the Coast Range between Prince William Sound and Western Alaska. Some waterfowl, however, remain in the Whittier area year-round. A large rookery on the north side of Passage Canal contains numerous birds including gulls and kittiwakes. The kittiwake rookery has about 6,000 breeding Black-legged kittiwakes, 20 to 30 Glaucous-winged Gulls and 10 to 20 Pigeon Guillemonts. Although this is the largest Kittiwake colony in the Sound, it is small by Alaska standards. Colonies in the Gulf of Alaska and Pribilofs number 50,000 to 200,000 kittiwakes. This rookery is very accessible and visited by tourist ships and some recreational boaters, and the colony is in fact the most visited seabird colony in Alaska. The Bald Eagle is common to the area and Rufous humming birds, once thought not to travel as far north as Whittier, are summer visitors. The operators of the Sportsmans Inn and residents of the Whittier Manor ensure that the humming birds are well fed.

G. SUMMARY/IMPLICATIONS

When viewed collectively, physical characteristics portray the Whittier area as a land of rugged physical features and harsh climate - a land where the forces of nature must be carefully considered. The Army recognized these forces when it designed and constructed the original military complex. The design of the complex was relatively compact and the accommodations for vehicles were minimized.

The basic recognition of nature's effect and power should be emphasized in plans for future growth and development of the community. Expansion of existing utilities and roads to serve new areas will be expensive due to bedrock and topography. Thus, Whittier must promote an efficient living environment which minimizes direct conflict with the forces of nature. New development areas, such as Emerald Cove, which are not contiguous with the existing utility system, will need separate facilities for sewage and water.

Chapter II People of Whittier

A. POPULATION

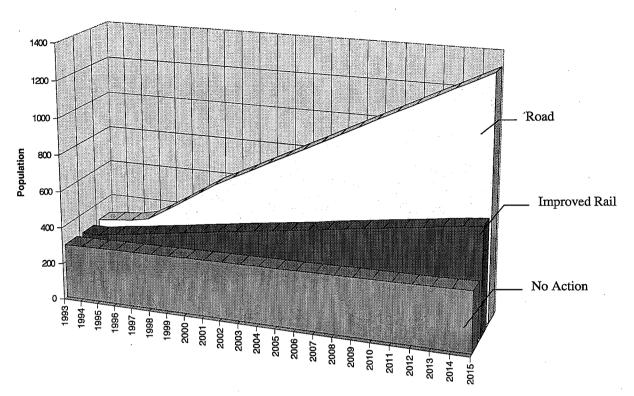
The 1990 census reported 243 persons living in the City of Whittier. The population decreased in the mid to late 1980s in concert with the economic recession that affected the entire state. The population of Whittier had been increasing at about 9% per year since 1988, primarily as a result of oil spill activity and increased cruise ship traffic. The community's 1992 population of 294 is still below the peak of 344 persons experienced in 1985.

Whittier has historically experienced rapid population rises and declines, with most of these reflecting the extent of military involvement. The Army first conceived and built the community in the early 1940's. At the height of military activities in the late 1950's, there were over 1,000 people living in Whittier, but its population plummeted when the Army began pulling out in the early 1960's.

Like many small Alaskan communities, the population of Whittier also varies dramatically according to the season. During the summer, a large number of recreational users and an increasing number of commercial fishermen seeking access to Prince William Sound descend on the City. The majority of the recreational people arrive on the weekend and spend only a limited amount of time in the City. Many year-round residents feel Whittier's summer population now increases to about 500. In the last several years, there has been an influx of workers with fish processing, railroad, construction, recreational and other seasonal employment activities. The Summer of 1989 was an especially busy one due to the use of the area by crews working on oil spill related jobs. Many of the condominium units in Whittier are owned by people from the Anchorage area and are used as recreational retreats.

Present trends suggest that Whittier's population will increase by about 50 persons between 1992 and 2015, assuming no change in access from Portage. This trend is less than a 1% annual increase over that time period, and it is less than the natural increase (births minus deaths) in population. The projected 2015 population of 330 would be slightly less than the previous peak population of 344 in 1988. Because this population growth would occur with small incremental changes each year, it would have minor impacts on the community. The ethnic and social structure of Whittier's population is expected to remain similar to its current composition.

Population Projections



If there is improved rail access, employment gains and associated migration to the community, changes in the number of persons per household, and natural increases would result in additional population in Whittier by 2015. Whittier's population in 2015 may be double existing population levels, although construction of additional housing and other infrastructure will be needed to achieve this level of growth. These changes would result in more persons moving to the community after construction is completed. Families with children would compose a larger portion of the population, and Native Americans would become a smaller portion of the total population (although the total number of Native Americans would likely increase). These changes would have a moderate impact on the social and ethnic structure of Whittier. Minimal population increases are expected in Portage with minor impacts on that community.

If businesses in Whittier respond to the potential demand for services and activities generated with improved road access and reduced travel cost, there would be a substantial growth in employment following the availability of road access. The rate of growth in the first few years would likely exceed historic growth rates, and a large number of persons would migrate to the community in response to the number of available jobs. If adequate housing and other infrastructure are developed, Whittier's resident population in 2015 could be four to five times greater than the present population. Housing availability may be a major constraint to this level of population growth. With substantial population growth the social and ethnic structure in Whittier in 2015 would be much different from its current composition. In addition to a greater number of people in the community, there would be more families, increased numbers of children, and a smaller percentage of Native

Americans. Seasonal workers in the tourism and fishing industries, and persons with vacation or recreational homes in the community, would increase the community's population substantially in the summer.

These changes would be a major impact on the social and ethnic structure of Whittier, and the concomitant population increases would affect other aspects of the social and economic fabric of the community.

The City's Comprehensive Plan should determine the community's ability to address the issues associated with increased population growth caused by improved access from Portage. It may be possible to impose a toll on travel through the tunnel to lessen the number of visitors and reduce the facilities and services necessary to accommodate future growth in both Whittier and Portage. A decision regarding implementation of tolls is still pending. Plans by private developers for housing projects should be incorporated in the planning process for this growth.

B. COMMUNITY CHARACTER

The people of Whittier lack many of the traditional ties to the land and subsistence that characterize most of Alaska's rural and predominately Native villages. Whittier has a relatively short history, as the community was not built until the 1940's and the City was not incorporated until 1969. Many of its residents consider Whittier to be "home", but a large part of the population is generally transitory.

As indicated in two recent community surveys, the distribution of ages in Whittier tends towards the upper age groups. A large percentage of the population is employed by various government agencies. Many people are self-employed and switch back and forth between available seasonal work and self-employment. Detail results of a 1989 community survey, as well as one completed in 1994, are in Appendices A, B, and C of this document. The returns were significant and the results should give an accurate snap shot of Whittier, from the perspective of local residents and those from Anchorage who visit and recreate here at the time of the surveys.

Community character is a function of physical attributes, economic structure, physical infrastructure, and the collective experiences of a community's residents. Whittier's physical setting will be minimally affected by any of the new access alternatives, although indirect and cumulative land use changes could alter site specific settings. Changes in economic structure and physical infrastructure are discussed in more detail elsewhere, but their influences on community character are summarized here.

Whittier's character is distinctive among small towns. It is set in a scenic natural area dominated by the ocean, steep mountain walls, and glaciers. It receives extraordinarily high snowfall. It was originally a military outpost, which led to its emphasis on commercial-industrial port and railroad land uses and its unusual condominium-style housing. It is very much an ocean-oriented town, focused on recreational boating in

Prince William Sound, fishing, and shipping. And it is connected to the most populated region of Alaska only by the railroad passing through two long tunnels, which make visiting a unique, time consuming experience. The city is a pass-through point for thousands of tourists and Alaska recreators each summer.

The community has a core of long-term residents but the 1990 census found that 51% of Whittier's population had moved into their residences within the previous 15 months, and only 25% of the population lived in the same house in 1985. The transient nature of much of the community's population is one reason there are few social groups in the community. Groups and other social institutions are often formed and continue to exist because of long-term relationships and family ties within the community; these are not common among much of Whittier's population. The greater the increases in population, visitors, vehicles, housing, businesses, and required infrastructure in the community, the greater the change in Whittier's character. Present trends would result in little impact on the community character of Whittier.

People both within and outside the city of Whittier implied through their comments to the EIS planners that the public sees Whittier as unique, safe, "Alaskan," not commercialized (i.e. not focused on high profit at the expense of quality), and while perhaps at capacity for its ability to handle visitors, not overrun. At the same time, some people described small-town Whittier as too small and potentially unable to maintain its long-term economic viability.

However, this can change significantly, depending on whether new access is provided to the community. Depending on the level of access, employment opportunities can increase dramatically. The results are best described in the accompanying table, which are based on the total numbers of visitors and residents expected to be associated with each scenario. The accompanying table presents projected numbers of visitors, vehicle trips, and residents for each access alternative's development scenario, including the scenario for the no-action alternative. This information is meant as a general aid to understanding the scope of possible indirect impacts. If the business community, the City of Whittier, and the Alaska Railroad Corporation does not respond to accommodate visitor wants and needs, the actual numbers of residents, visitors, and workers could be lower.

ESTIMATED VISITORS TO AND RESIDENTS OF WHITTIER

		1997	_ 0 121 (2 222		2015	
Estimated # of:	No New Vehicles	Improved Rail Access	Road Access	No New Access	Improved Rail Access	Road Access
Vistors to Whittier	91000	2190000	897000	120000	539000	1406000
Vehicle trips*	43000	70000	656000	55000		1123000
Whittier residents	280	300	360	330	440	1120

^{*}Vehicle figures represent one-way trips. Any car making a round trip would count as two trips.

Source HDR Engineering 1994, and Northern Economics 1994

To arrive at the totals depicted in the table, three scenarios were developed by the Alaska Department of Transportation based on a set of related assumptions about future growth in tourism, population, and economic growth in Southcentral Alaska, and growth and development in Whittier.

If there is no new access, then no destination lodges or resorts would be built in western Prince William Sound. The present harbor in Whittier has 324 moorage slips, and no increase in the number of slips is assumed. Charters and tours would increase at 3.4% annually. Visitors to the Begich Boggs Visitors Center would continue to visit Whittier at a relatively low rate. No cruise ship calls are anticipated in Whittier. A small proportion of people who now visit the Kenai Peninsula also visit Whittier, and this would continue. A growth rate of 0.4% in ferry traffic is assumed. Other visitors would include commercial and industrial uses (such as trucks hauling fish to plants in Anchorage, trucks hauling supplies for community population and economic activity), fishing boats and other miscellaneous uses throughout the study period.

The population of Whittier would remain at present levels through 1996 (in response to lost cruise ship activity), increase at 2% annually from 1997 through 2002 in response to increasing tourism, and moderate to 0.5 percent after that time.

If there is improved rail access, it is assumed to be built in phases. A second train and other improvements would not be implemented until required by traffic volumes. These later improvements may not occur until several years after the initial improvements are made.

In response to increased visitation to Whittier, development of a large lodge and many cabins and condominiums is assumed by 2005, in Whittier or somewhere in the western Sound. By 2015, additional lodging space is assumed, along with a doubling of condominiums. Moorage slips are assumed to double by 2005 and triple from today's number by 2015. Charters and tours are assumed to increase at 6.5% per year through 1999 and 3.25% after that. A larger percentage of visitors to Portage would travel to Whittier, given slightly lower train fees. Cruise ships are assumed to return to Whittier, assuming a rebuilt railroad dock and improved rail access are available in 1997. The rate of visitation by cruise ship passengers is projected to increase at 4.3% annually through 1999 and 2.15% thereafter.

The number of Southcentral Alaska visitors that would choose to visit Whittier would also increase. Ferry service is assumed to increase at the 2.9% rate of regional population growth under this scenario through 1999 and 1.45% after that date. Other visitors would increase gradually through the life of the project. The population of Whittier is assumed to increase at 2% per year through 1996, increase at 3% annually from 1997 and through 2007, and 1% per year for the balance of the study period.

If new road access is provided, it is assumed there are no tolls or fares to Whittier. If tolls or fares were implemented to pay for road maintenance and tunnel operations, the

increases in visitors would be slightly lower than assumed, depending upon the toll structure and cost established. Lodges are assumed to develop in Whittier or western Prince William Sound rapidly. Moorage slips similarly are assumed to increase to approximately the same level (triple today's level) but several years sooner. With more convenient access, people who own boats are assumed to make more trips per year to Whittier. Boats brought by trailer would also increase substantially.

Boat tours are assumed to attract more people at a rate of 6.5% per year through 1999 and half of that rate thereafter. A much larger proportion of visitors to Portage Glacier is assumed to go on to Whittier than under the other alternatives. Whittier is assumed to become a major port for cruise ships, again assuming that the railroad dock is refurbished or a new dock in built. Passenger volume is projected to increase at 4.3% annually through 1999 and 2.15% over the balance of the study period and with more ships stopping than under the improved rail access alternative. Other southcentral Alaska visitors are assumed to visit Whittier at levels nine times greater than level projected under the improved rail access alternative.

Ferry traffic is expected to grow at the same general rate as under the improved rail access alternative, except for a 25% increase all at once in the opening year, 1997. With a much larger number of recreation visitors, a large corresponding increase in business traffic would be expected to serve and supply Whittier and also Chenega Bay and other locations in western Prince William Sound.

The population of Whittier is assumed to increase at 2% per year through 1996, increase 20% annually from 1997 through 2000 because of substantial construction and new employment, increase at 5% per year for the next decade, and increase at 2% annually thereafter.

Therefore road access and reduced travel cost would stimulate private interests to develop new businesses in Whittier. These new opportunities would increase population and employment levels. The increased population would require the City to upgrade the type and amount of infrastructure available in Whittier. This would alter the isolated, small town character of Whittier to more closely resemble larger communities such as Homer and Seward located on the road network of Southcentral Alaska. Development of housing and other infrastructure will change the existing land use patterns and may disperse the concentrated port/industrial nature of the community. The presence of significant human activities outside the core area would somewhat alter how viewers perceive the natural setting of Whittier and the feeling of remoteness.

The additional jobs in the community would require the migration of a large number of persons into the community. This migration will affect the social fabric of the community and reduce the small town character of Whittier. Native Americans will become a smaller portion of the population. The cost of travel with the road alternatives will be substantially reduced with this alternative and the frequency of travel will be greater than

at present. This will reduce the feeling of isolation and remoteness. These changes would have moderate impacts on the community character of Whittier.

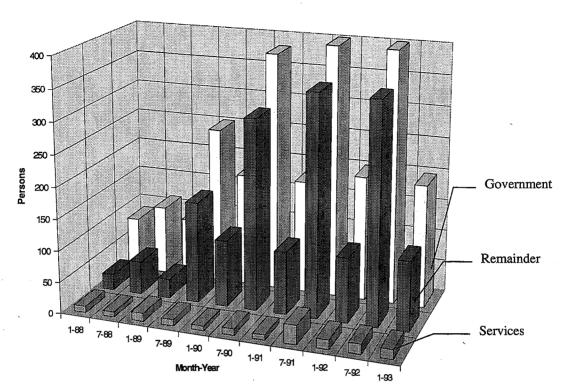
Mitigation of impacts related to the community character will depend on the vision of this comprehensive plan and the decisions and plans of other agencies controlling development in the area. In addition to this plan, state and federal agencies should review their land use plans, economic development plans, and other plans to ensure that they are adequate to guide and accommodate growth in the area, including the present community character and the desires of local residents.

C. EMPLOYMENT

The potential work force in Whittier (age 16 and older) is 200 (U.S. Bureau of the Census 1990). Of those, 137 (69%) are in the labor force. Employment is primarily concentrated in transportation; local, state, and federal government administration; fishing; education; and construction. The private sector employs 63, local government 35, state government 10, and federal government 3. Fifteen were self-employed. There were 16 Whittier residents holding commercial fishing permits in 1992, and 12 were active (Alaska Commercial Fisheries Entry Commission 1992). ARRC, State of Alaska, City of Whittier, and Chugach School District are the largest employers in the community. The unemployment rate is 8% or 11 persons.

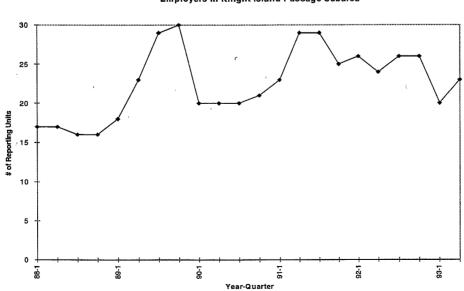
Median household income in Whittier was \$33,636 in 1990. Of the 108 households (the 1990 Census recorded 106 occupied housing units and 108 households), 43 were occupied by families and 65 were occupied by unrelated individuals. There were 41 households occupied by single people. Thirteen percent of households and 32% of individuals were below the poverty level.

The accompanying figure shows total employment on a monthly basis since 1988 for the Knight Island Passage statistical subarea. This subarea includes the communities of Whittier, Tatitlek, and Chenega Bay, as well as several islands in Prince William Sound that have little or no employment. Employment data solely for the City of Whittier are not available. However, Whittier accounts for the vast majority of jobs depicted, and this demonstrates that there was a dramatic change in the number and seasonality of employment in the community that occurred in 1990 with the increase in tourism and other recreational visitors to Prince William Sound. These increases exceed employment peaks experienced during the Exxon Valdez oil spill in 1989. The other communities in the subarea have limited recreational or summer seasonal employment.



Monthly Employment Knight Island Passage Subarea

Another measure of changes in the employment picture of Whittier is the number of reporting units, or employers, in the subarea. The peak number of reporting units in 1989 represent the response to the Exxon Valdez oil spill. The number of reporting units has followed a downward trend since 1991 but remains higher than the previous pre-oil spill peak of 17 in 1988.

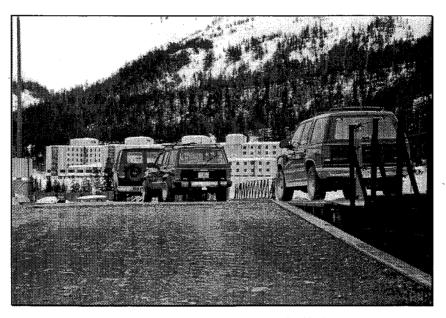


Employers in Knight Island Passage Subarea

In 1990 the percentage of Whittier residents 16 and over who participated in the labor force was 69 percent. This was below the state labor force participation rate of 75 percent. The labor force participation rate for males in Whittier was 5% lower than the state rate and the labor force participation rate for females in Whittier was 11% lower than the comparable state rate.

If there is no new access, minor increases in employment would continue, primarily in seasonal tourism related businesses. Some increase in other services and local government would also occur to accommodate the minor population gain anticipated by 2015. The number of available jobs would not be large enough to accommodate the natural increase in population growth, causing more people to migrate from the City than to it. The percentage of Whittier residents in the labor force would continue to lag behind the State of Alaska's average labor force participation rate.

As to the Alaska Railroad, now one of Whittier's largest employers, continued steady employment in Whittier will continue for the foreseeable future if the current shuttle is retained and there is no improved access.



Autos departing Railroad shuttle in Whittier

If improved railroad shuttle service is provided, one additional permanent employee and four full-time seasonal employees would be added. This addition of jobs could add some income to the Whittier economy, if the jobs were held by new or existing Whittier residents. Some or all of the new jobs might be held by Anchorage or Girdwood commuters, which would reduce the benefit to the Whittier economy.

Construction caused by providing improved rail access would benefit the regional economy and has potential for a small benefit to the local economy of Whittier. Design and construction cost estimates of \$27.5 million for this access alternative would likely be paid primarily to design and construction firms from Anchorage or elsewhere in Alaska. Construction crews could include Whittier or Portage laborers. The potential for increased shipping and port activity and providing meals and other services to construction workers would temporarily benefit Whittier's economy.

If improved rail access were provided, tourism and recreation related businesses are expected to increase their employment levels to accommodate an increased number of travelers. Additional jobs would also be created to meet the needs of the increased population. If Whittier businesses are aggressive in serving this market, the number of jobs created would exceed the natural increase in population. The labor force participation rate of Whittier residents would increase after the project is completed as Whittier residents responded to the availability of new jobs. If adequate housing and other infrastructure are available, other persons would migrate to the community for jobs that are not filled by Whittier residents. Whittier residents would benefit from new services or facilities in the community and increased competition. These changes would have moderate positive impacts on employment in Whittier.

The roadway alternatives are much more dramatic. They would add 11 to 17 permanent operations and maintenance jobs in the area. The railroad shuttle is assumed to close down, and those employed only for the shuttle would be out of work or transferred to other parts of the railroad operation. The jobs gained and jobs lost from Alaska Railroad employment within the community would approximately cancel one another, so there would be no net benefit or disadvantage to the local economy. Any new jobs in Bear Valley could go to Whittier residents, as Whittier and Portage both provide the closest potential workers. Indirect employment gains to Whittier could be substantial, and would more than offset any potential job loss at the railroad.

Design and construction of either roadway alternative would involve large sums of money, much of it spent in the region. The estimated cost is between \$49.8 million and \$69.9 million. Design and a large portion of the construction would likely be done by Alaska companies, and Whittier would benefit, particularly in construction jobs. The clearest benefit to Whittier's economy is the likelihood that there would be an increase in shipping and port activity during the construction that is required for either of these alternatives. In addition, vacancy rates in condominium housing would decrease.

The new road access alternatives would result in a substantial increase in the number of Whittier visitors. Tourism and recreation related businesses are expected to increase their employment levels to accommodate the increased number of travelers. Whittier residents would benefit from new services or facilities in the community (eliminating the need to travel to Anchorage for goods and services not presently available in the community), increased competition, and reduced travel cost. More frequent schedules and reduced travel cost would let Whittier residents commute to jobs in Anchorage, Girdwood, and

other areas. At the same time, seasonal jobs in Whittier could be filled by commuters from other areas, thus reducing demand on Whittier housing and other community facilities. Permanent, year-round employment in Whittier could be filled by Portage, Girdwood or Anchorage residents, but most of these jobs are expected to be filled by Whittier residents.

The number of full-time jobs created to serve the large number of visitors and increased population could exceed the natural increase in population. In fact a recent report completed for the City by International Tourism and Resort Advisors suggests 200 full time and 400 part time jobs from new tourism opportunities alone. The labor force participation rate of Whittier residents would increase after the construction project is completed as Whittier residents respond to the availability of such new jobs. If adequate housing and other infrastructure are available, other persons would migrate to the community for jobs that were not filled by Whittier residents. Seasonal employment is expected to be primarily filled by non-residents. These changes would have major impacts on employment in Whittier.

Chapter III Housing

A. INVENTORY

Unlike most communities where single or low density residential development is the most common form of housing, in Whittier, nearly all residents live in one of two buildings. Most people live in either the fourteen-story Begich Towers or the two-story Whittier Manor, both of which were originally built as military quarters a half century ago. An inventory of housing in the community follows:

Begich Towers:	Number of Units	198	

Occupancy is seasonal, with 35% occupied year-around and

at least 75% each summer

Whittier Manor: Number of Units 80

Whittier Resident 33

Non-Resident 47

Whittier Subdivision

Phase II Seasonal homes 5

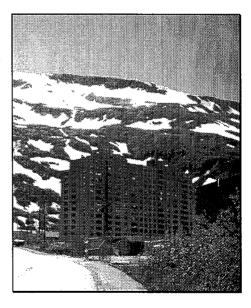
The Begich Towers manager estimated a 5% annual rate of change in ownership and that 10% are regularly rented out on a monthly basis. The 198 condominiums are generally used for the following purposes:

- 42% are owned and occupied by year-round residents;
- 48% are owned by people outside of the community;
- 10% are owned by the City or other government agencies

In general, all occupied living units in Whittier are of fair to poor quality. The Begich Towers is a poured concrete structure and offers a greater diversity of unit size than the Whittier Manor. All units in Begich Towers and the Whittier Manor have full living facilities.

The Whittier Manor is a wood structure. One bay of the Whittier Manor was rebuilt following a 1981 fire. Some of the units in each of the buildings have been remodeled. In some cases separate units have been combined to give larger living areas.

The only new addition to the local supply of living accommodations in Whittier is the Anchor Annex



Begich Towers

which was built in 1954 and renovated and occupied in 1986. The building has four efficiency and two one bedroom apartments.

The few single family homes located along Cove road are of contemporary wood frame construction standards but are usually only occupied in the summer. They have no utilities.

The Buckner building, which was designed to be the principal living quarters for the Army, is unoccupied, run down and all items of value were stripped for salvage long ago. It has not been maintained for the past 15 years and has deteriorated. Although it is one of the largest structures in Alaska at 270,000 square feet, it may be unusable.

B. COSTS

Compared with many other communities in the State, the costs of owning, purchasing or renting housing in Whittier is relatively inexpensive.

Although the average purchase price for the better quality condominiums has risen slightly, the average price has remained stable for the last five or even ten years. In the past, many purchasers of condominiums were people from outside the community who mostly used the units only on weekends. Some of the new condominium owners appear to be buying the units to live in Whittier year-round. Many people choosing to live in Whittier are retired or semi-retired and a major factor in their moving to the area is the reasonable cost of purchasing a condominium.

Following are the average purchase prices for condominiums in 1994. The estimates were obtained in conversations with the managers of the Begich Towers Condominium Association and the Whittier Manor Homeowners Association.

PURCHASE PRICES

Number Bedrooms	Begich Towers	Whittier Manor
Efficiency	\$3,500 - \$10,500	\$5,000 - \$6,000
One bedroom	\$7,000 - \$14,000	\$6,500 - \$7,500
Two bedroom	\$17,000 - 29,000	N/A
Three bedroom	\$19,000 - \$33,500	N/A

Purchase prices at the Begich Towers and Whittier Manor, however, vary greatly depending upon the quality of renovations made to the unit and its location. Units in both buildings with a view of Passage Canal generally have higher resale values.

The following are the average assessed values that were obtained from the City's 1994 real property tax rolls. The assessed values have decreased in recent years while rental prices have increased slightly. Demand for rental units has increased, and it is difficult to find

rental units during the summer months. This trend reflects Whittier's growth as a fish processing and seasonal recreation center.

ASSESSMENT VALUES 1994

Number Bedrooms	Begich Towers	Whittier Manor
Efficiency	\$8,000 - \$9,000	\$4,000 - \$5,000
One bedroom	\$9,000 - \$15,000	\$4,000 - \$5,000
Two bedroom	\$13,000 - 17,000	\$5,000 - \$8,000
Three bedroom	\$15,000 - \$20,000	\$8,000 - \$9,000

In past years, a large number of people on fixed incomes have been moving to Whittier. The major attraction is the low rental rates and plentiful supply of affordable living space. Homeowners, however, are sometimes losing money in renting apartments, as they cannot receive adequate rental fees to pay taxes, utilities and maintenance costs.

Following is a table outlining average summer monthly rental fees in 1994 for the Begich Towers and Whittier Manor. The prices were obtained from conversations with the managers of the Begich Towers Condominium Association and Whittier Manor Homeowners Association. Winter rental rates are significantly lower.

SUMMER MONTHLY RENTAL COSTS

Number Bedrooms	Begich Towers*	Whittier Manor
Efficiency	\$200 - \$250	\$350 - \$350
One bedroom	\$200 - \$350	\$4,000 - \$450
Two bedroom	\$300 - \$450	N/A
Three bedroom	\$350 - \$500	N/A

^{*}Includes monthly condominium association fee and utilities.

Condominium fees at the Whittier Manor were a flat \$154 to \$160 for efficiency units, \$195 for one bedroom units and \$289 to \$329/month for a double unit. At the Begich Towers, condominium fees are assessed by a formula which varies by side of the building and the floor the unit is on. The fees range between \$75 and \$250 per month.

There are about 25 vacant lots in Whittier that are presently zoned for single family residential development. The topography of the land and high costs of providing access, sewer and water, however, has resulted in no houses being built. Most of the lots are less than 1/2 acre and the 1994 assessed values range from \$9,000 to \$33,000. Ownership of these lots has changed very little in the last five years.

C. HOUSING DEMAND

Presently two inns offer 36 transient accommodations to visitors in Whittier. Of the apartments and condominiums available for residential purposes, as many as 40% are vacant in the winter. In the winter of 1993-94, 54% of the units in the Whittier Manor were vacant. In the winter of 1990-91, only 153 units in Begich Towers were occupied, which is a vacancy rate of 25%.

While information regarding current occupancy of the 198 units in Begich Towers is not available, it is noteworthy that the winter vacancy rate in other residential units in town is over 40%. However, in the summer transient workers are said to occupy most vacant housing units. This high vacancy rate constrains rent increases and depresses housing prices and property values. Further, assuming that the vacancy rate in the Begich Towers has not changed significantly in the past 3 years, Whittier must have about 75 residential units available for purchase or rental. This suggests that if any significant new development were to occur, initial housing for new residents would not be difficult.

As a result, the number of existing housing units in Whittier is adequate to meet projected year-round demand until about 2010 with present trends. After that date a few additional housing units would be required each year to accommodate the limited population growth. Demand during peak summer months would exceed the number of available units before 2010 and demand for certain types of housing (such as three bedroom units) may also occur before that date. Housing prices, property values, and rents will remain low until future population growth and household formation reduce the number of vacant units.

If new rail access is provided, demand for housing by Whittier households and people desiring recreational homes should increase over time and, if new harbor facilities are constructed, housing demand would then exceed supply. Future population growth and household formation will account for the majority of this demand, but recreational demand will become a larger component if new harbor facilities are developed. Because summertime occupancy rates are higher, demand during peak summer months would exceed the number of available units earlier than five to ten years after improved rail service is available. This seasonal demand would probably not be sufficient to finance additional rental housing, although it would increase occupancy rate at hotels and other lodging facilities.

Demand for housing by additional households and those desiring recreational homes would be much larger under the road alternatives than the other access alternatives and may exceed available supply in less than five years after vehicle access is provided. Future population growth and household formation will account for the majority of this demand, but recreational demand will become a larger component if completion of new harbor and new resort facilities occurs. Proposed resort development would aid in meeting the demand by recreational home owners, and possibly for some Whittier residents. If these facilities are not constructed, however, additional housing will be required in the city core or elsewhere in the community. Demand during peak summer months would exacerbate

housing problems. Increased demand would also increase occupancy rates at hotel and other lodging facilities.

Any sizeable influx of new residents would have to be accommodated in new housing. Vacant land is now available for this purpose. The Begich Towers and the Whittier Manor complexes occupy only 4.3 acres. This represents a mere 7.8% of the land earmarked for residential uses in the City's 1990 Comprehensive Plan, and only 5.4% of the +/- 80 acres regarded as suitable for this purpose. Therefore, considerable land area is available for housing development.

There is an especially large pent-up demand for single family homes in Whittier, and demand for this type of housing exceeds the availability of building lots in the city core area. others seeking recreational homes are expected to request single family units. This pressure may result in development outside of the core area, and the best lands suitable for single family and low density multi-family residential development are in Whittier Subdivision Phase II along Cove Road. With the City's recent receipt of management authority over 600 acres of State lands in Emerald Cove (located along the proposed Shotgun Cove road) and within Shotgun Cove, many residents are hopeful that single-family homes may become a possibility. These sites would be expensive for development, however.

Housing prices and property values will increase as demand exceeds supply. Property owners will see their equity increase - but property taxes will increase for home owners - and tenants will incur higher rents. Lower income residents and those on fixed incomes may find it difficult to afford housing as demand approaches the available supply. These changes will improve and increase the housing stock in Whittier while increasing housing prices and rents.

In summary, if road access is provided, alleviation of housing related impacts in Whittier requires adequate infrastructure to accommodate new housing. There are some vacant residential properties in the Whittier core area but utilities still need to be extended to them. The City of Whittier has a plan for a subdivision at Emerald Cove and Chugach Alaska Corporation has conceptual plans for a development at Shotgun Cove that includes housing, but both of these require construction of an expensive road. Higher density housing development in the core area may be the most cost-effective means of providing housing, but more affluent individuals will desire larger lots in more scenic locations. The City must plan and work with state and other officials to ensure adequate infrastructure and land are available, and that such conceptual plans reflect desires of the housing market.

Chapter IV Community Services

I. THE CITY OF WHITTIER

The City owns, operates and provides many community services. The facilities where these services are provided are described in this section.

The City owns its present administrative office complex, a series of two single apartments on the first floor of the Begich Towers. The City Council, Planning Commission and Port & Harbor Commission meet in the Firehall. This building, which also houses the City Marshal's office and headquarters, is owned by the U.S. Forest Service and is leased by the City. The City shop is located in the Composite building west of the Firehall, which is also leased by the City. The City Medical Clinic is located in room 301 of Begich Towers.

A. CITY ADMINISTRATION

The City of Whittier was incorporated in 1969 as a fourth class city. The State Municipal Code (Title 29), revised in 1972, reclassified fourth class cities as second class cities. Whittier became and has remained a second class city because of its population, which has always remained well below the 400 resident threshold for first class cities.

Whittier has a City Manager form of government. The Manager is responsible for administering the City's day-to-day operations and carrying out the policy direction of the City Council, including the assurance to all taxpayers and residents that government is effective and responsive to their needs. Central staff support to the Manager is provided by the Municipal Clerk and Finance Officer. The Manager, however, relies on the Marshal and Public Works Director/Harbormaster to operate their respective Departments.

The present composition of the City Administration is as follows: City Manager, City Clerk, Finance Officer, Marshal, and Public Works Director/Harbormaster. The City Council also retains the services of an attorney to assist with legal concerns.

Whittier is using many of the powers available to second class cities. The City taxes real property at the maximum rate established by the voters, one-half of one percent (.005) of the assessed valuation, although the recent passage of recent legislation permits the City Council, with the consent of the voters, to go as high as two percent (.02) of assessed valuation. Whittier requires business licenses for all commercial establishments and charges various fees to users of the Small Boat Harbor to support harbor operations. The City also exercises planning, platting and zoning powers. Whittier adopted its most recent zoning ordinance in late 1984 and its most recent subdivision ordinance in 1985.

B. CITY COUNCIL

A seven member City Council provides policy direction. Council members are elected at a general City election in October and serve staggered terms. The elected members select one of their members to serve as mayor. The Council regularly meets twice per month on Monday evenings, and special meetings and work sessions are scheduled frequently.

C. PLANNING COMMISSION

The Planning Commission has five members and at least one alternate. Its regulatory powers include making platting, variance, and conditional use decisions and it advises the City Council on planning and zoning concerns, including the content of the Comprehensive Plan and zoning map. The Commission operates according to Title 17 of the Whittier Municipal Code, and meets at regular monthly meetings and periodic work sessions.

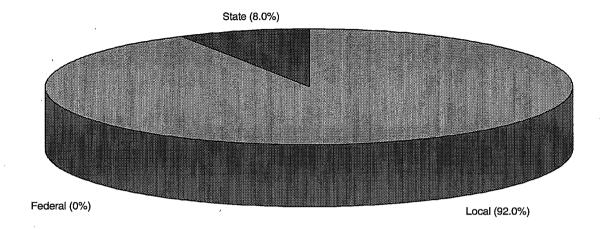
D. PORT AND HARBOR COMMISSION

The Whittier Port and Harbor Commission has seven members and at least one alternate, and acts in an advisory capacity to the City Council and Administration on the operation of the Small Boat Harbor, which is managed by the City under long term lease from the Alaska Department of Transportation and Public Facilities. The Commission also advises the City Council on maritime and transportation infrastructures (i.e. hoists, cranes, bridges, etc) and capital projects and on economic development opportunities on the waterfront consistent with the Comprehensive Plan.

In Whittier, Port and Harbor Commission activity centers on enhancing the City's ability to serve as a tourism and fisheries port and to provide associated port facilities. Inasmuch as the Alaska Railroad Corporation owns the Marginal Wharf and adjacent waterfront property and warehouses, the commissions authority is limited. Whittier ordinances establish the position of port director with broad authority to enforce regulations and oversee activities at the port at the direction of the City Manager.

II. MUNICIPAL REVENUES AND EXPENSES

Whittier Revenues 1994



In fiscal year (FY) 1994 (July 1, 1993 to June 30, 1994) the City received State funded Municipal Assistance and Revenue Sharing revenues of \$24,494 (This is greatly reduced from prior years, e.g. FY88 was \$70,714). Other City revenues were generated through the following: local real property and sales taxes, service charges from providing local public works services, lease of City property and principal and interest payments on properties in escrow.

The fiscal year 1994 budget (July 1, 1993 to June 30, 1994) for the City was \$2,774,624. The City budget for FY 1995 is \$2,865,461.

SUMMARY AND COMPARISON FOR FY 93, 94 AND FY 95 BUDGETS

	1993	1994	1995
General Fund	789,122	805,127	730,622
Medical Clinic	114,220	127,853	74,240
Water Department	74,030	62,250	48,300
Waste Water Department	36,050	35,150	35,200
Sanitation	119,641	90,200	5,305
Small Boat Harbor*	541,600	591,557	606,300
Capital Projects*	201,650	682,003	997,994
Special Revenue Fund	160,000	165,009	167,500
ADEC Hazardous Waste Grant	3,650	-0-	- 0-
Passenger Boat Dock Fund	-0-	103,475	- 0-
Whittier Redevelopment	-0-	112,000	200,000
Project			
TOTAL	\$2,039,963	\$2,774,624	\$2,865,461

^{*}The Small Boat Harbor is a separate account and capital projects are funded through appropriations by the state legislature.

The City is responsible for operating the Whittier Small Boat Harbor, under a management agreement with the owner, the State of Alaska. Revenues generated by providing harbor services can only be used for the harbor. The harbor is operated as an enterprise fund. Revenues generated through services and moorage are used to finance operations and maintenance and fund capital investment. The harbor operates at greater than its capacity during summer months.

III. MUNICIPAL SERVICES

A. POLICE/FIRE

Public safety in Whittier is shared by several City organizations, the Office of the City Marshal, the Volunteer Fire Department, and the Search & Rescue/Dive Team. The City police force numbers have varied in recent years due to budget reductions and seasonal fluctuations. The City volunteer fire department has one fire truck, a volunteer emergency medical service with a "high rail" ambulance that can be used to transport patients by rail to the Seward Highway, and a volunteer search and rescue team. The U.S. Coast Guard, Fish and Wildlife Enforcement, and the Alaska State Troopers also provide public safety services in the area.

The Public Safety Department, or Office of the City Marshal, was established in 1993, but it has existed in many forms since the City was established. It has three full-time officers. The Marshal concept is a unique method of local law enforcement in Alaska, and permits the assumption of civil duties beyond normal police services.

The fire department is comprised of local volunteers. The local police serve in many capacities including search and rescue, emergency medical services, hazardous materials, animal control and detention.

The Police station and fire equipment are located in the firehall at the corner of Whittier Street and Eastern Avenue. The building is in fair to poor condition. However, it does have two holding cells and an intake area with two small offices. Police and fire equipment consists of: 1 fire truck, 1 rail car ambulance, and two vehicles: 1989 & 1990 4 X 4's. The existing equipment and building serves the purpose intended to the bare minimum.

Whittier does not have a major crime problem. Disorderly conduct related to drinking generates much police business, about 85% of the total calls. Drug related incidents have increased in the past few years.

CASE TYPE Felony and Misdemeanor	1991 90	1992 100	1993 110
Incidents, Disturbances	610	800	1,413
Total calls for Police Service	700	900	1,523

The Whittier Volunteer Fire Department has 15 members (excluding EMS) who have received extensive training to prepare for normal concerns, as well as potential emergencies ranging from earthquake and tsunamis to the spill or other discharge of hazardous materials. The number of calls received has varied on a yearly basis but the summer months of June, July and August account for about one half the yearly calls.

Whittier also has a volunteer search and rescue organization with ten members, led by a Deputy Marshal. This group is comprised of Anchorage Police Officers, State Troopers & Corrections Department Officers. It can be extremely active during the summer, especially on holiday weekends. Limited access by air and infrequent train schedules have been mentioned as factors impeding search and rescue operations, and concern has been expressed about the response time for State Troopers or fire trucks from Girdwood to reach Whittier in the event of a major emergency. Budget restrictions have reduced the number of paid public safety positions in Whittier and equipment and supplies are often below desired levels. The City establishes its own standards for staffing and services based upon budget priorities and allocations.

Without new access, present trends would result in limited population increase and growth in the number of visitors to Whittier. The major demands on public safety services in Whittier would continue to revolve around crime prevention and emergency medical services. During the summer, search and rescue would be active in responding to relevant situations, primarily for visitors. At least one additional full-time paid police position would be needed by 2015 and one paid position may be necessary to coordinate fire safety, emergency medical services, and search and rescue for the anticipated level of population and visitors. This coordination position could be placed in the Public Safety Department. This expected population growth and increase in the number of visitors would have a moderate impact on public safety in Whittier.

Should the associated development occur, more convenient rail access could result in additional population and growth in the number of visitors to Whittier. The primary demand for public safety services would remain crime prevention and emergency medical services. During the summer months, search and rescue volunteers would be active in responding to relevant situations, primarily for visitors. Two to three additional full-time paid police positions could be needed by 2015 to meet the needs of the service population. One paid position may be necessary to coordinate fire safety, emergency medical services and search and rescue for the anticipated levels of population and visitors. Fire safety will become more important as additional development occurs outside the core area of Whittier. A fire chief could be hired to lead fire safety and coordinate the other public safety services. The availability of additional staff would have a beneficial effect, while the additional population and increased number of visitors would have an adverse affect on public safety in Whittier.

Road access and reduced travel cost would support substantial population increase and growth in the number of visitors to Whittier. The additional visitors and larger population

would increase the number of responses by public safety personnel. This demand is expected to result in additional public safety providers in the community. Highway road congestion and traffic safety, as well as crime prevention and emergency medical services, would be the primary public safety services if road access occurs. During the summer months, search and rescue volunteers would be active in responding to relevant situations, primarily for visitors. This growth and changing public safety needs would require four or more additional full-time paid police positions by 2015. Additional police would be needed in the summer months. Substantial infrastructure and housing development would create a demand for a fire chief to coordinate fire services, and one additional paid position would be necessary to coordinate increased demands for emergency medical services and search and rescue for the anticipated levels of population and visitors. These changes would have a major impact on public safety services in Whittier.

The availability of improved rail or road access could improve the response time of State Troopers, fire trucks from Girdwood, emergency medical services from Anchorage, and other public safety providers in the event of a major emergency in Whittier. This backup support would reduce the pressure on the City of Whittier to have the capability to respond to all situations that arise. The communities of Whittier, Portage, and Girdwood should develop mutual aid agreements and plans, and improve communication networks to take advantage of the improved access.

B. PUBLIC WORKS

The City Public Works Department provides the following services: road maintenance, snow removal, water and sewer, and emergency power supply. The department is run by a Director and he supervises three full-time staff.

The City shop and public works office is located on Whittier Street in the Composite building. Although the City owns the entire building, only the central section is used as the shop. The east end is leased to fishing related businesses and the west end is being leased as a support facility by the Department of Defense to house its tank farm management firm.

The Public Works Department's major responsibilities with the roads are grading the unpaved roads, snow removal and dust control. Snow removal, in particular, is a major expense.

The road system in Whittier is not extensive. In the recent past, the City, the Alaska Railroad and the Army were all responsible for maintaining different sections of the road system. The Army no longer maintains the road from the bridge at Whittier Creek to the fuel tank storage area at the head of Passage Canal (West Camp Delta). The Air Force has contracted for the management of the Tank Farm. The contractor is responsible for maintenance of the road from the second bridge to the Tank Farm. The City is responsible for maintaining most other roads.

The City assumed the Alaska Railroad's former maintenance responsibilities by entering into a 20 year lease with them in November 1983. The lease enables the City to construct and maintain approximately 1.4 miles of roads on Alaska Railroad property for a period of 20 years. These roads are Depot Road, 1,700 feet in length; Whittier Street, 1,800 feet; and Small Boat Harbor Loop, 2,550 feet all of which are located in the Whittier Core area.

In December 1983, the City entered into an agreement with the Alaska Department of Transportation and Public Facilities (DOT/PF), Local Service Roads and Trails Office, to accomplish the location and design work needed to upgrade some of the roads under lease from the Railroad. In fiscal year (FY) 1988, the City received a \$474,187 grant from the legislature for paving local roads.

There are about 10 miles of City maintained roads in Whittier. A few roads are unpaved, but the main section of the roads on the upper Whittier Delta (around the Begich Towers and the other major buildings) are paved and have storm sewers, curbs and sidewalks. A new paved roadway through the harbor area was completed in 1988. Overall, most roads are in good to average condition.

In addition to the City maintained roads, there are about 4 miles of unpaved privately maintained roads in the Head of the Bay. A 2.5 mile long pioneer road from First Salmon Run leading to Second Salmon Run is unpaved, not maintained and in poor condition.

Most roads, with exception of the one from First Salmon Run to Second Salmon Run, were originally built by the Army. In designing the town, the Army built facilities close together to ease their accessibility and keep the necessity of automobile traffic to a minimum. Even today, most buildings in Whittier can be reached by a short walk, and an underground tunnel connects the school with Begich Towers.

C. HEALTH

There are no full-time doctors or other social service facilities or agencies in the town. The City contracts with a physician in nearby Girdwood to come to Whittier each Wednesday to see patients.

The availability and need of direct health care services in Whittier has increased every year. In the past, only Emergency Medical Technicians (EMTs) were available to provide direct emergency first aid care and the City lacked medical facilities and supplies.

In mid-1983, the City's Health Advisory Committee worked with Providence Hospital to establish a trial Nurse Practitioner Outreach Program. The success of this program and local desire for better quality medical care prompted the City to seek funds for a permanent physicians assistant (PA).

During the 11 years that followed the City General Fund transferred some \$40,000.00 per year in subsidies to the clinic. In 1994, the Whittier City Council appointed an ad hoc

citizens committee to report its finding regarding the level of medical service the community felt necessary given the level of subsidy required to provide an on site mid-level care provider. The committee reported that the citizens favored a weekly visit by a physician and a strong Emergency Medical Technician service. The City Council responded by entering into a contract with the newly formed Girdwood Medical Clinic located ten miles from Portage, which has proved popular with local residents and budgeting for increased training support for the EMT Corps.

The EMT Corps is part of the Department of Public Safety and is supervised by a sponsoring physician for medical care matters and by the City Marshal for administrative matters. An ambulance fitted with high-rail gear for use on the Alaska Railroad track to the state highway at Portage is operated by ambulance drivers certified to operate the vehicle.

In addition to providing emergency medical care to Whittier residents the EMT are often called on the help those from outside the community where no emergency care is available. On these occasions, the injured or sick are met at the boat harbor where care is administered and transport is arranged.

More convenient rail access would support development that could increase the number of visitors. This would result in employment and population growth above that expected with current trends. Demands for medical services by this larger service population would have a moderate impact on medical and other services in Whittier.

Demands for additional social services will expand with the population growth. The City of Whittier may elect to provide additional social services, although budgetary considerations will constrain this expansion of services. The State of Alaska may provide certain social services on an occasional basis based on the needs of the additional population.

More convenient road access and reduced travel cost would support a substantial increase in the number of visitors and employment and population growth. A full-time physician's assistant or nurse practitioner would be required immediately after the initial development occurs. Expansion of the clinic would be required at that time. The City of Whittier operates the existing clinic with an annual operating deficit at current population levels. It is unlikely that the clinic can cover its operating costs, and funding for a new or expanded clinic is uncertain. Five to ten years after development occurs, the population and number of visitors could be large enough to support a full-time physician.

Demands for additional social services will expand with the substantial population growth anticipated with development. The City of Whittier may elect to provide additional social services although budgetary considerations will constrain this expansion of services. The State of Alaska provides a number of social services, but it is not likely that additional state employees would be located in Whittier to provide these services. The demand for state services may be large enough that some state agencies would have employees travel

to Whittier during the work week to provide these services. Residents of Whittier would have access to better medical and social services locally and will not need to travel to Anchorage.

The anticipated growth in population and number of visitors would place additional demands on medical and social services in the community. These demands will have a major impact on medical and other services in Whittier.

D. RECREATION

With Whittier being located in Passage Canal and having easy access to Prince Williams Sound, its recreational activities are mostly marine oriented. The town's many seasonal recreational visitors and its residents enjoy motor boating, sightseeing, sport fishing, sailing and recreational crabbing and shrimping activities on the Sound. The City is also a popular site for scuba divers who enjoy the clear, deep waters of Passage Canal. Whittier's Small Boat Harbor is the foremost community facility that supports marine uses.

Whittier's winters, which are typical of coastal area in Prince William Sound, have strong winds, deep snows, large amounts of rain and frequent storms. This climate prevents most winter marine activities and severely restricts land-based recreational pursuits. The weather compounds the need for adequate indoor recreation facilities in the community.

One of the most popular land-based recreational opportunities is the Community Education Program. It is funded by the Chugach School District and is operated out of the school gymnasium for nine months of the year. The Gym is open for public use provided adult supervision is available five nights (Monday through Friday) a week. Adult and children's indoor volleyball, basketball, a weight room and roller-skating are some of its most popular activities.

A covered picnic area was built in 1989 at First Salmon Run and the City has entered into a lease with the U.S. Fish and Wildlife Service for use of a 37.87 acre tract in the Head of the Bay. Current plans are to use this area as a rifle range. An overnight camper park has been established on Railroad land east of the school and north of 5th Street. The site includes a covered picnic area, outdoor privies and a drinking water source.

About one-half of present visitors to Whittier are members of tour groups whose time and activities are generally controlled or restrained while in Whittier. Because of this control, these groups place limited demands on services and facilities in Whittier and spend little money. Uncontrolled or independent visitors spend more time in the community and require more services and facilities. They may spend more money per person in the community than controlled visitors. The City will continue to focus its efforts to provide a more extensive trail system throughout the area for such visitors.

Present trends indicate modest increases in the number of future visitors to Whittier. Improved access may stimulate additional travel and new recreational businesses in Whittier. These new businesses, in turn, may attract additional visitors.

With improved rail access and a rebuilt or new cruise dock facility, cruise ship lines may return to Whittier and increases in other controlled user groups would be expected. The number of independent travelers would also increase if new facilities and accompanying services are developed. Total visitors in 2015 could be almost five times greater than the number of 1993 visitors. Summer months and weekends would remain the peak time periods for visiting, and facilities and services would need to be expanded to meet those peak demands.

Reduced travel cost, and more convenient travel would occur with new road access. Such road access, and a new or rebuilt cruise ship dock, would likely mean most of the cruise ship lines will return to Whittier. Increases in the number of controlled visitors and independent visitors would occur with these improvements. Total visitors in 2015 could be ten times greater than the number of 1993 visitors. Summer months and weekends would remain as the peak time periods for travel, and additional growth in the number of visitors would be expected in the shoulder months and winter seasons. A large number of new recreational facilities and services would need to be developed to attract potential visitors, and new roads and parking would need to be constructed to handle vehicle traffic in the community. Accommodating this number of visitors would have major impacts on tourism and recreation in Whittier to meet those peak demands.

E. CITY-PROVIDED UTILITIES

(1) Water:

The City water system serves the area from Whittier Creek to the DeLong Dock, at the east end of the port. Three wells located between Whittier and Fifth streets supply water to the area. The wells are between 70 and 80 feet deep and range in capacity from 225 gallons per minute to 500 gallons per minute.

The City reservoir is an underground concrete tank installed by the U.S. Army in the 1940s. It has a capacity of 1.0 million gallons. It is located at about 200 feet elevation above and slightly to the west of the Buckner Building. Fire hydrants are located near major buildings and in the harbor and railroad dock area. The City system easily meets the needs of current users. The Defense Fuel tank farm has its own potable water well, located just northeast of tunnel portal 1.

The major portion of the City water distribution system was constructed by the U.S. Army Corps of Engineers in 1952. The water system was repaired after the 1964 earthquake, including the abandonment of pipe segments no longer in use. In 1973 the Corps prepared design documents calling for the complete replacement of the water distribution system. The improvements were never constructed.

The Cunard, a luxury cruise ship line, began stopping at Whittier in the summer of 1983. By the summer of 1990, 53 cruise ship stops occurred, a doubling since 1985. More recently, these ships have ceased coming to Whittier, but it is expected they will return if there is improved access. Each cruise ship took on about 225,000 gallons of water, a large amount even for Whittier's excess water capacity. The City charges \$2.18 per 1000 gallons, call out time for two City shop employees. The average sale was about \$500 to \$600 dollars per ship.

Although the City charges for resupplying any visiting cruise ships with water, it does not charge other boats for taking on water at the harbor. The City's harbor is the best source of fresh water on the west side of the Sound.

The City's water sources can provide sufficient water to meet increased demand from population growth and visitors. Some additional increase in treatment capacity and distribution line extensions in the core area may be required, but those can be accommodated with standard charges and most increases to developers and new customers. Future per capita costs for water service in the core area will remain similar to present per capita costs. Development outside the core area would require costly extensions or development of additional water sources. The source of funding for expanding or extending the water utility would likely be borne by the developer. Per capita costs for water service in these areas would be much higher than present per capita costs unless state grants are obtained for the capital cost.

The three-phase upgrade of the existing water distribution network has been developed and partially constructed. Prior to the system upgrade, line leakage exceeded the total domestic consumption. Phase One of the upgrade was constructed in the summer of 1993. Funding for the second phase took place in the summer of 1994. Phase Three will likely take place in 1995, after which time the entire distribution system will have been replaced with new, 10-inch diameter cement-lined ductile iron pipe. After all proposed upgrades are complete, at a cost of \$3.3 million, the Whittier water distribution system will adequately support significant future development.

Watering hydrants for tour ships will be installed and will include back flow preventers. The new water system will include disinfection by chlorination. The City's water is moderately corrosive. A Corrosion Control Study was completed in 1994. This corrosion has had an effect on plumbing in all original buildings in Whittier. The study makes recommendations as to treatment and possible plumbing replacement.

The well water is untreated but has been reported to be of satisfactory quality by both residents and water testing laboratories.

CRW Engineering Group, designers of the water system upgrades, have stated that, after all of the proposed system upgrades are completed, the fire hydrant spacing and number will be adequate for existing needs.

Reserve water for fire suppression does not meet criteria called for in the Uniform Fire Code, however, it appears that it does meet the minimum standards required by the Insurance Services Office which rates populated areas according to the fire protection available. These rates are then used by local insurance companies to calculate insurance premiums.

In the future, new 10", 8" and 6" mains will need to be extended to newly developed areas of the city and surrounding area. All other water system requirements will be in place when Phase Three construction is completed.

(2) Sewer:

The sanitary sewer system in the City of Whittier consists of a wastewater collection and primary treatment facility. Treated effluent is discharged into Passage Canal. Primary treatment of the wastewater is performed in one 15,000 and four 20,000-gallon septic tanks. It is sized to meet the present needs of the City, or approximately 250 residents. The sewage system does not meet state standards; the City has a waiver from EPA, although it does not have a waiver from the ADEC.

The only storm water system was built during World War II and is very small - six inlets, mostly in the townsite area, and an ocean outfall.

The sewer system was damaged by the 1964 earthquake and has become obsolete by modern standards. The City studied several options to upgrade this system through funding provided by the State and the Federal Environmental Protection Agency.

In the spring of 1984, the City completed construction of a modified settling tank sewer system with deep water discharge. This system consists of several storage tanks, lift stations, new sewer lines and an out-fall into Passage Canal. This system requires minimal maintenance. The sludge needs to be removed on an annual basis and the out-fall line needs to be inspected every several years. New sewer lines were installed in the harbor area during 1988.

The City is planning to develop a new wastewater treatment facility and is seeking funds to move ahead with the project. Developments outside the core area would require lengthy utility extensions, development of additional treatment facilities, or, in the event of low-density development, on-site disposal systems. The source of funding for new facilities or extensions is unknown, but would likely be borne by the developer.

A new wastewater treatment facility is required today, and an expanded system is required under any new access alternative. The most basic system will cost from \$1.6 to \$2

million. The impact of the cost of this facility on Whittier residents will depend on the level of grant funding provided by the state. Wastewater disposal rates for Whittier residents will likely increase.

The improved rail alternative would require a slightly larger treatment plant with a cost of up to \$2,500,000. A larger population and business base may reduce the cost per capita for annual operating cost and capital amortization. The improved rail alternative would have a moderate impact on wastewater disposal and wastewater disposal rates in Whittier and a minor impact on the City's water utility.

If new road access occurs a larger treatment plant with a cost of approximately \$2,900,000 is required. A larger population and business base will substantially reduce the cost per capita for annual operating cost and capital amortization. The road alternatives would have a moderate impact on wastewater disposal and wastewater disposal rates in Whittier, and a moderate impact on the water utility.

Increase in wastewater disposal rates can be further reduced by soliciting for additional state grants. A larger population base can reduce the per capita capital cost, but per capita operating costs should remain comparable.

Future Needs:

The current practice of discharging treated sewage into the open water is in violation of state and federal laws. A local waste water treatment plant should be implemented with the required sewer line replacement mentioned above.

Costs:

Sewer Line Replacement (Whittier core area)	
approximately 6,500 LF X \$110.00/ft	\$ 715,000
New Sewer Line Installation (Urban Development)	
10,000LF X \$110.00/ft	\$1,100,000
New Treatment plant	\$2,300,000
TOTAL	\$4,115,000

(Includes 10% contingency and 25% administrative and engineering costs).

IV. EDUCATION

The Chugach School District operates the school in Whittier. It is a Rural Education Attendance Area (REAA) that receives the majority of its funding, about \$1.7 million in fiscal year 1994, from the State of Alaska Foundation Aid program. Federal Law PL-874 provided about \$265,000 in federal funds in fiscal year 1994 through the state to the school district for children of parents living and/or working on federal property. The support was provided in lieu of local tax revenues. Other revenues to the school district come from timber harvest on National Forest lands (about \$8,000 in fiscal year 1994), and interest and other minor sources. The City of Whittier is a second class city and is not obligated to provide local tax support for the school.

At the outset of the 1993-94 school year, 38 students were enrolled in the Whittier school. The 1992-93 school year saw a 45 student enrollment, with a capacity of about 80 students. Capacity can vary somewhat depending upon the number of students in various grades. Elementary school children require less specialized facilities and less building space than high school students.

The ratio of students to teachers in the Chugach School District is about 8 to 1, with Whittier currently at a 9:1 ratio. The Whittier school presently has three full-time teachers, two aides, a principal/teacher, a library aide/breakfast cook, and a secretary.

The Whittier Public School is located behind the Begich Towers, and houses educational facilities for grades Kindergarten through 12th. A Pre-school is provided as need and funds allow.

The school building was remodeled extensively several times. In 1981 four classrooms, a library, darkroom, kitchenette, small office and storage area and a multipurpose room were built. In 1985 a regulation size gymnasium was added to the east side of the building. In 1986 the multipurpose room was expanded into library, offices and lunch room.

The 1981 remodeling added over 5,000 square feet of space, and a major renovation was completed in 1985. This addition was made possible through a \$2,038,000 State Legislative appropriation. The school also planned and built a 4,600 square foot covered play area.

The school district's superintendent and administrative offices are located in Anchorage. In addition to the Whittier School, they are responsible for administration of schools in Tatitlek, Icy Bay, Chenega and Two Moon Bay. Extension school services are provided for home schooling. The school district also offers community education services directed toward adult education and recreation.

The existing school facility is operating at less than half its capacity and present trends would result in limited population increase in the community. The existing school would provide sufficient capacity to meet anticipated student enrollment through 2015, although the facility may reach obsolescence before that time. The number of required teachers would increase although fewer teachers would be required if the staffing ratio were increased. These changes would have a minor impact on education facilities and services in Whittier.

If improved rail access occurred, or a road were constructed, this would provide more convenient access to Whittier, which would result in more visitors to the community, and businesses would likely locate or expand in response to increased opportunities. Net migration and natural population growth will increase the city's population and associated student population. Student enrollment may exceed existing school capacity soon after improved access is available. A new school or an expansion of the present school would be required to accommodate the student population.

Additional teachers would be required. It is anticipated that the teacher to pupil ratio would be increased at the higher student enrollment, but a full-time principal and other staff members may be required resulting in student to staff ratios that are similar to the existing student to teacher

ratio of 9 to 1. The City of Whittier would have a population base large enough to qualify as a first-class city and could elect to provide education services in the community. Additional taxes would be required to support the school in addition to partial state funding. In the event that the City did not elect to provide education services, the Chugach REAA would continue to operate the school with state funding. Substantial increases in student enrollment will have major impacts on the education facilities in Whittier.

V. PRIVATE UTILITY SERVICES

A. ELECTRIC POWER

Chugach Electric, Inc. supplies electric power to Whittier via a 7.5 KV above ground line. The line passes through the two railroad tunnels to Portage. At times, weather conditions have interrupted electric service. Chugach Electric is the largest electrical cooperative in Alaska, serving the Anchorage area. It generates power from hydro-electric and gas turbine sources. The Electric rates in Whittier are about 4 cents per kilo-watt-hour for residential use to a little over 7 cent per KWH for commercial users. This rate structure is the lowest in Prince William Sound and one of the lowest in all of coastal Alaska. The low electric rates in comparison to Seward and other Prince William Sound communities is a significant factor in the development of commercial fish processing in Whittier. The cost of any upgrades to the Chugach Electric generation and distribution system to provide better service to the community would be borne by the entire Cooperative, and therefore lessen the local economic impact.

The City owns several backup emergency generator units because of the frequent power failures. These portable units can supply a total of 850 KW reserve power. Most building complexes and the harbor have their own back-up units. A few buildings, however, are not covered by emergency electrical power. The City accommodates these shortfalls by rotating power during an emergency.

B. TELEPHONE AND CABLE TELEVISION

The Whittier telephone exchange is owned by the Yukon Telephone Company. The exchange has been increased in capacity by new digital switching equipment and about 200 local connections are in service. For long distance calls, the exchange uses 16 long distance fiber-optic trunks routed through the small tunnel. All telephone cables within the City are located underground. An expanded range of services is now offered rather than the limited ones available in 1985 including planned cellular telephone service in Whittier and throughout Prince William Sound.

Cable television service offering a variety of channels is available through Yukon Telephone's cable television services. A repeater station and satellite dish supply the Rural Alaska Television Network throughout the Whittier core area.

C. SOLID WASTE SERVICES

The City has had many difficulties in providing solid waste and garbage disposal. In the mid-1980's the city turned to an incinerator system because of problems with its landfill. This landfill, located adjacent to the west camp road near the landing strip, had environmental and aesthetic problems and is now closed except for limited storage of materials. Open fires, scavengers and water and air pollution are among the site's problems.

An incinerator was put into operation in the summer of 1984, located in a building east of the Whittier Manor. It was an oil fired unit, which operated for several years until air quality became a concern. The EPA ordered the city to cease operations until the unit could meet air quality standards. The incinerator was rebuilt and upgraded in 1989, but still could not meet EPA standards.

Because of this, the City arranged to have solid waste hauled by truck out of town from a central solid waste handling facility east of Whittier Manor. The cost of transportation over the Railroad, and its cost of disposal at the Anchorage Landfill, made this method of disposal expensive. The City heavily subsidized this operation with tax funds.

In early 1994 the City entered an agreement with Peninsula Sanitation, Inc., to provide the service without subsidy. An interim arrangement initiated in the Spring was successful, and this company will continue to provide the service from centrally located dumpsters around town for the foreseeable future.

Whittier's location, regional geology, and limited land base make it difficult to envision how the community might develop a landfill that would meet state and federal requirements. As a result, the City will continue to transport solid waste to Anchorage for the foreseeable future. Future growth will primarily result in additional solid waste generated in the community, presumably expanding the services of a private solid waste contractor.

D. NATURAL GAS

At the current time, the City is not served by natural gas. In fact, natural gas produced in Cook Inlet does not serve any community in Turnagain Arm, just Anchorage and the western Kenai Peninsula. In recent months, there has been discussion among leaders in Girdwood and Whittier about the possibility of extending natural gas from Anchorage along Turnagain Arm into Whittier. These discussions have included key executives at Enstar Natural Gas Company, who attended a City Council work session in 1994.

Two choices for extending natural gas exist. First, Enstar or another provider could construct a new line, which is probably prohibitively expensive in light of the relatively few customers who would be served along the way. Indeed, Enstar indicates that such a line could only support extension from Anchorage to Girdwood, and that Whittier would not

be served. Second, there has been discussion about the possible abandonment of the POL line, which now transports fuel from Whittier to Anchorage, along Turnagain Arm. This has occurred because the military fears further oil spills like the one last year near Indian, which has cost millions of dollars to clean up.

If the POL line were abandoned, Enstar and other providers have indicated that they would take it over and refit it for natural gas, at cost. This would mean both Girdwood and Whittier would be served by natural gas. The current DOD fuel operation in Whittier would not change, and no employees would lose their jobs, as DOD would transport the fuel from the fuel tanks at the Head of the Bay to Anchorage via the Alaska Railroad.

The City will work with the Girdwood Board of Supervisors to encourage the military to abandon and lease of the POL line. If that decision is made, the City will then ensure that the line is available to complete efforts to provide service to Turnagain Arm and Whittier residents and businesses. Additionally, such a line could also give residents of the City new industrial jobs, as the City could serve as a transshipment point for liquified natural gas.

Chapter V Transportation

A. RAILROAD

The only means of overland access to Whittier is the Alaska Railroad, which is operated by the state-owned Alaska Railroad Corporation (ARRC). Railroad traffic consists of occasional freight trains from Whittier to Anchorage and rail shuttle service between Portage and Whittier. This rail line was constructed in the 1940s and is maintained currently with the original alignment and structures. Automobiles, trucks, and recreational vehicles drive onto railroad flatbeds, and drivers remain in their vehicles for the 30 minute ride to or from Whittier. Foot passengers may park their vehicles at the shuttle loading area and board railroad passenger cars.

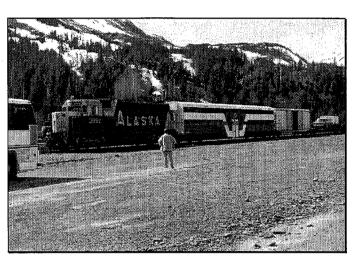
The present shuttle operation is as follows:

Summer

(May through mid-September)
six round trips daily, five
days/week
four round trips daily, two
days/week

Winter

(Mid-September through April)
three round trips daily,
three days/week
four round trips daily, one
day/week



Alaska Railroad shuttle arriving in Whittier.

The summer train set typically provided by ARRC consists of one locomotive, two coaches, one baggage car, six loading flats, 12 vehicle flats and one caboose. The train length is 483m (1,585 ft.) One additional coach is available for the shuttle service.

In addition to the shuttle service, there are approximately 5 to 10 freight trains per month year round. Freight train lengths vary from 1,219m (4,000 ft) to 3,048m (10,000 ft).

The following table presents ridership on the shuttle for 1980, 1985, 1990, and 1992. The volumes shown here exclude passengers carried on chartered trains. The passenger and vehicle numbers are manual counts taken by ARRC personnel. Information on chartered train ridership is not available, but the majority of the 50,000 passengers carried on chartered trains in the entire ARRC system were associated with the Whittier-Portage shuttle, principally with cruise ships, which no longer operate out of Whittier.

WHITTIER-PORTAGE I	MES (One-Way Trips)	
YEAR	PASSENGERS	VEHICLES
1988	128,006	21,952
1989	127,057	23,336
1990	149,068	27,665
1991	162,602	29,819
1992	157,082	20,105
1993	162,455	24,454
1994	145,441	26,431

The amount of passenger and vehicle use on the shuttle varies by season and day. Ridership is heaviest during the weekends in the summer and lowest during the winter months. On summer weekends, approximately 800-1,600 passengers and 125-200 vehicles per day use the shuttle. Summer use is somewhat lower during the week, particularly on Thursday, when the State Ferry Bartlett does not call at Whittier. Winter ridership average 200 passengers and 250 cars per month.

During the 4 month summer season, about 40,000 passengers per month, or 160,000 per year, and 13,000 vehicles use the shuttle. The number of summer passengers rose significantly with the increased use of Whittier as a terminus for cruise ships. Although these ships no longer operate in Whittier, passenger service has remained at constant levels. The distribution by month for calendar year 1993 indicates the disparity of seasonal ridership on the shuttle.

1993 Alaska Railroad Corporation **Portage - Whittier Ridership** 345 726 January 567 310 February 846 395 March April 1,436 688 17,129 2,935 May June 36,267 4,447 5,167 48,469 July 37,735 4,245 August September 14,700 2,730 1,410 2,115 October 1,290 961 November 1,175 821 December 24,454 Total 162,455 GRAND TOTAL 186,909

ARRC also operates a rail-barge facility at Whittier. Freight cars are delivered to the port of Whittier by barge and go by track to Anchorage and Fairbanks. A 1992 study commissioned by the Alaska state department of commerce and economic development entitled "Southcentral Ports Development Project", concluded that Whittier has potential as a commercial and bulk export port.

B. WHITTIER ACCESS PROJECT

Transportation access to Whittier is limited. Although it is accessible by air, rail, and water transport, each has serious limitations. For example, access by air is limited to small wheel planes or float planes due to the length of the runway, and weather frequently restricts regular access to the community. Rail service is infrequent, particularly in the winter, and the Alaska Marine Highway System operates once each day in the summer, but it does not call at Whittier in the winter. Rail charges, train schedules, and other factors contribute to significantly higher freight transportation costs than for comparable communities in Southcentral Alaska, and subsequent higher living costs for Whittier residents.

As a result of these factors, as well as the economic potential of the area, the State of Alaska has undertaken the Whittier Access Project to consider viable alternatives to upgrade access to the community from the road network of Southcentral Alaska.

<u>The Access Alternatives</u>. Four alternatives for improving access to Whittier have been developed and are now considered "viable" for the purposes of the Environmental Impact Statement now underway. The following briefly describes these alternatives:

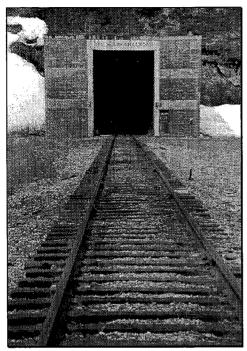
Alternative #1:

The no-action alternative would essentially preserve the ARRC shuttle system as it now exists. Up to a point, ARRC can respond to increased service demand by altering the shuttle schedule. ARRC would also continue routine inspections of the line, providing tunnel scaling and debris removal as required and repairing or replacing ballast and rail segments.

Alternative #2:

The improved shuttle service alternative would provide capacity improvements to the existing shuttle. The shuttle upgrade would meet shuttle user demands projected for the 2015 design year. To meet user demands, this alternative would use two train sets, each a push-pull operation with two locomotives. This configuration would eliminate current requirements to disconnect and reconnect the locomotive. The track alignment at the current Portage terminus would be modified so that the shuttle would no longer have to back off the setout track, and new track and signals would be added between the two tunnels to allow the two train sets to pass in the middle of their runs. The rail and track bed would be upgraded to improve the shuttle ride. In addition, the staging areas would

be modified to allow for expected increases in traffic and to make loading and unloading as efficient as possible.



Alaska Railroad Tunnel Portal

Alternative #3:

The least expensive road alternative provides combination two-way road and joint automobile-train tunnel linking Portage Glacier Road to Whittier. roadway would be one way, one lane through the 4,054m (13,300 ft) Whittier tunnel. It would be a two lane, twoway facility elsewhere. Between Portage Creek and Bear Valley, the roadway would follow the northwest shoreline of Portage Lake. Soon after entering Bear Valley, the roadway would cross Placer Creek. At a waiting area in Bear Valley, the roadway would narrow to one lane and enter the Whittier tunnel. The tunnel would not be significantly widened. To remove disabled vehicles from the mainline traffic, turnout areas would be constructed. Because the tunnel would operate as a one-lane, onedirection facility, staging areas at each end of the tunnel would be required to store vehicles during conflicting traffic movements in the tunnel. From West Camp into Whittier, the roadway would widen and operate as a twolane, two-way facility. New bridges would be constructed

over Portage, Placer, Whittier and Shakespeare Creeks to accommodate additional traffic.

Alternative #4:

The other road alternative is the same, except for the Whittier tunnel section. In this alternative, the tunnel would be widened to 6.4m (21 ft) clear roadway width, and 7.0m (23 ft) between tunnel walls. This width would allow for a single lane and full shoulder. There would be no need for turnouts, and so none are provided. This addition adds about \$20 million to the projected construction cost of the road access alternative.

<u>Financial Considerations in Selecting the Most Superior Alternative</u>. Cost considerations may dictate the alternative which is selected. One method of evaluating cost considerations is to rank construction cost of each alternative by cost per visitor during the design life 1997-2015. In such an analysis, the construction cost per visitor for the improved rail access alternative is two to three times greater than it is for the road alternatives.

COST PER PERSON-MOVEMENT FOR IMPROVED ACCESS TO WHITTIER.

ALTERNATIVE CONST	FRUCTION COST	TOTAL 1997 -2015 PERSON-MOVEMEN	
TWO (2)	\$ 27,500,000	8,578,000	\$ 3.21
THREE (3)	\$ 49,800,000	39,459,000	\$ 1.26
FOUR (4)	\$ 69,900,000	39,459,000	\$ 1.77

Another cost consideration is projected operations and maintenance of the selected alternative, once completed. The current rail access is judged to have the lowest operations and maintenance costs of the four alternatives. Operations and maintenance costs for the road alternatives are similar. Annual operations and maintenance costs for the improved rail access alternative have been estimated to be of a higher order of magnitude than the road alternatives. This alternative would also have slightly higher labor requirements, although the annual costs for maintenance of the train, track and other items for that alternative are thought to be of the same order of magnitude as the maintenance costs for the tunnel, operations center, lighting, and highway under the road alternatives.

Cost consideration may also be based on economic cost/benefit ratios. A 1994 study commissioned by the Alaska Department of Transportion analyzed the costs and benefits of the road and rail alternatives. The study found that the road alternative shows a positive cost benefit ratio even after Whittier infrastructure development costs are factored in. The improved rail alternative shows a negative cost benefit ratio before Whittier infrastructure development costs are added.

Visitors to Alaska and residents of Alaska will benefit in a number of ways from access improvements. These benefits include savings in passenger travel and freight costs, increased recreational time, improved search and rescue efforts, quicker access for emergency medical services, and enhanced economic development opportunities.

The value of these benefits can be substantial. For example, the distance from the Seward Highway at the Portage turnoff to Whittier is about 11 miles, the distance from the turnoff to Seward is about 79 miles, and the distance from the turnoff to Homer is 178 miles. Using 28 cents per mile for the cost of operating a vehicle, the cost of the round trip from the Portage turnoff to Whittier and back is about \$6. The costs for round-trip travel to Seward and Homer are \$44 and \$100, respectively, and take 1-1/2 to 4 hours more travel time. Thus, recreational trips diverted from the Kenai Peninsula to Whittier would realize significant savings in time and money.

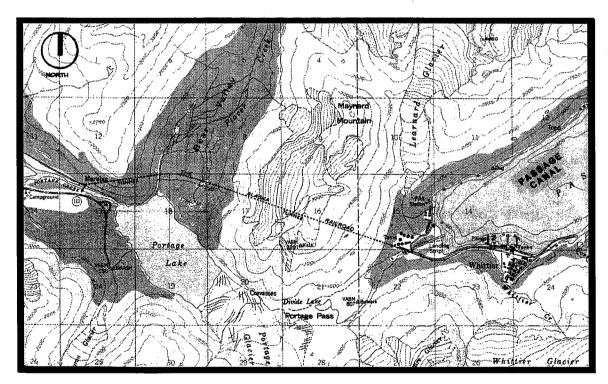
Because some data required to conduct a benefit to cost analysis are not available, the EIS consultants have concluded that, in their best professional judgement, the current access represents the status quo and implies no change in existing costs or benefits. From that base, the improved rail access alternative has a slightly positive benefit to cost ratio (benefits exceed costs), although the benefits are not expected to be very large and increased operations and maintenance costs could exceed the benefits. However, the road alternatives would generate substantial benefits to the traveling public and these benefits should exceed the higher capital costs associated with construction. The expanded roadway alternative has substantially higher capital costs than the least expensive road alternative, and the improved safety benefits are not anticipated to offset this higher capital cost. Therefore, the least expensive road alternative, known as "Alternative 3", should have the highest benefit to cost ratio.

<u>Safety Considerations</u>. Safety considerations suggest that there are other benefits to improved access not measured in financial terms. There have been operational accidents on the current shuttle that have led to injury, but no deaths.

Rockfall has occurred in the Whittier tunnels and requires ARRC surveillance. Although rockfall has not been linked to injuries or damage, any increase in traffic in the tunnels will increase the exposure rate and will need to be addressed in the future if vehicular access is increased in the tunnels.

Because the current shuttle staging area at Portage is a fairly remote location, foot passengers must drive and leave their vehicles in the parking area along the Seward Highway. Vandalism has been a problem, and although the railroad has on-site security personnel in summer, some passengers are uncomfortable leaving their cars there.

<u>City of Whittier Position Favoring Alternative 3</u>. The City Council in May 1994 unanimously recommended the road alternatives, and particularly Alternative 3. Access would be more frequent and convenient with a road than the current shuttle access or service under the improved rail access alternative, even though it would not accommodate free-flowing automobile traffic as most roads do.



Route of Whittier Access Project Alternative 3

However, the Council recognized that there were limitations to the road alternatives. Because the tunnel would accommodate one-way traffic only, vehicles proceeding in any given direction would be required to wait until traffic moving the opposite direction had cleared the tunnel. During congested peak periods, service in any given direction would

be approximately once per hour. This frequency is the same as the shuttle service frequency under the improved rail access alternative, but hours of operation during peak summer hours under the road alternatives would likely be about 50% longer. The tunnel would likely be closed to vehicle traffic entirely between approximately midnight and 5 a.m. to save on operating expenses when traffic volumes are low and to permit passage of freight trains. Winter hours would likely be more restricted but daily access would certainly be available, unlike the rail alternatives. Indeed, there is no assurance the Railroad would provide daily service in the winter if the improved rail alternative is chosen, just as winter service is restricted today.

In the end, the Council concluded that, despite these limitations, the road alternatives would allow more frequent and substantially more convenient service to travelers than the rail alternatives. Further, although the road may include a toll for passage eastward toward Whittier, the toll would probably be less expensive than the current train fare.

C. FERRY SERVICE AND OTHER MARINE ACCESS

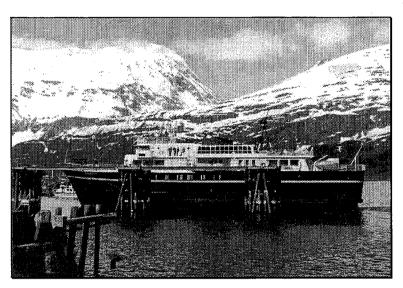
Marine access to Whittier is possible through State ferry and private tour boat services provided during the summer season. Since 1967, the Alaska Marine Highway System (AMHS) has operated a ferry, the M/V Bartlett, to provide service between Whittier, Valdez and Cordova. The Bartlett runs between these two cities six-times-a-week from May through September. The M/V Bartlett is equipped for both drive-on auto loading and foot passengers. No ticketing operations are performed in Whittier, only on-and-off loading. The ferry does run a winter route between Valdez and Cordova.

On average, about 22,000 passengers and 4,500 vehicles use the M/V Bartlett each summer. This level of use has been steady for the last 9 years. Significant increase in the amount of use cannot occur as this use approaches the maximum capacity of the M/V Bartlett. An increasing amount of the traffic on the summer ferry is chartered tourist buses which come through Whittier on the train shuttle. Ferry traffic has priority over passenger vehicles which can lead to late arriving cars being left behind if the train is full.

During the summer, the ferry system is well used, particularly for vehicles. There is a real and perceived problem with access to the ferry during the high-use periods. In a recent survey of ferry users, dissatisfaction with the "infrequent and inconvenient schedules" was identified as a major problem (AMHS 1993). The capacity problem for traffic within Prince William Sound is primarily with vehicles, not passengers (AMHS 1992).

The different traffic links of the ferry system in Prince William Sound serve different markets. On the Whittier-Valdez link, 65% of travelers are visitors from outside the state. The highest level of ferry traffic in Prince William Sound is between Whittier and Valdez. On the Valdez-Cordova link, the summer ferry users are made up of 70% Cordova residents, 10% seasonal workers, and 20% visitors from outside the state (AMHS 1992). These numbers indicate that the ferry provides an important day-to-day link to the road system for Cordova residents, as noted in a recent market study (AMHS 1993). This day-

to-day link could be extended to Whittier if a road were established there, because Whittier is just a one hour drive to Anchorage by highway, and Valdez is at least seven hours away. The study also notes, however, that daily jet service is available to either Valdez or Anchorage at rates competitive with the ferry. Therefore, improving access to Whittier would serve mostly those in Cordova who would want to transport a vehicle.



AMHS Ferry M/V Barlett at its Whittier dock.

AMHS has received application from the community of Chenega Bay requesting ferry service when a dock there completed. The application is currently under review. The determination probably would not be affected by any the Whittier access scenarios, although if service were instituted and Chenega Bay developed visitor facilities, tourist traffic from Whittier would be possible,

especially if supported by more convenient access to the Port of Whittier.

AMHS is in the process of evaluating options for increasing capacity in service within Prince William Sound. They range from switching to a larger ferry from within the system to purchasing another vessel to providing increased frequency of service. AMHS planning will determine whether or not ferry service becomes available to other communities in the Sound, constrained by the available funding for improvements from the Alaska Legislature. The selection of a fast passenger and freight ferry to augment service in the Sound is one of the alternatives recommended to AMHS. However, an AMHS report on the topic states that ferry service to Chenega Bay, Tatitlek, and other areas could be under used, making selection of that alternative doubtful.

Whittier is also served in the summer by two passenger tour boats, The Glacier Queen and Glacier Seas, which are privately operated by two different companies, Gray Line, a subsidiary of Holland-America West Tours and Alaska Sightseeing/Cruise West. These ships generally make daily runs from Whittier to Valdez during the summer months. Several other private tour boat operators conduct

sightseeing and hunting cruises, including the significant Phillips and Major Marine tour operations, but they arrive and depart from Whittier, and so do not contribute to transportation patterns with outlying communities.

From 1983-1992, Whittier was a northern termination point for luxury cruise ship lines. Cunard, Princess, Regency, World Explorer and Royal Cruise lines docked at Whittier

following voyages north from Vancouver, B.C. through Southeast Alaska's Inside Passage. In the summer of 1989, these lines landed in Whittier about 53 times. This was about twice the number of landings at Whittier in just two years. If they return, these cruise ship landings can bring an enormous number of people into the harbor area. In the past, cruise ship passengers spent little time in Whittier and were whisked away in tour buses immediately after disembarking. The challenge is to have these passengers stop long enough to shop and enjoy the community, thereby providing an economic base to its businesses.

In conclusion, if enhanced rail access from Portage is provided, it is expected there would be slightly higher levels of use for the AMHS ferry, but the impacts within the ferry system and for continuing road traffic at either Valdez or Whittier would be negligible. The projected use levels are within the capability of the existing ferry system.

However, the development scenarios associated with the road alternatives would result in the highest levels of increased use for the AMHS ferry. Adjustments in ferry capacity or scheduling would likely be necessary, a moderate impact to AMHS, particularly if ferry service is enhanced to provide an extension of the highway system for Prince William Sound communities.

As indicated above, Seward has replaced Whittier as the docking location for four cruise ship lines: Holland America, Royal Caribbean, Regency, and Princess. Under the road development scenarios, Whittier will probably recapture a large part of this trade if the Marginal Wharf and Marginal Wharf Building are improved and appropriate financial arrangements are made. In fact, the EIS consultants have suggested Whittier will capture at least one-half of the cross-gulf cruise ship traffic when the railroad dock is rebuilt and road access is provided.

D. AIRPORT

A short 1100 foot small light plane gravel airstrip serves as the primary air service facility. The strip has a small apron to tie down light planes, but has no lighting or navigational aid facilities. The airstrip originally extended out into Passage Canal an additional 500 feet. However, the 1964 earthquake removed this section. A helipad is located in the downtown area near the Public Safety Building.

At present, there is no air service between Whittier and other points in the State. Air travel into Whittier is limited by frequently adverse weather conditions in Portage Pass, particularly during the winter.

The infrequent number of planes that fly into Whittier prefer to use floats to land in Passage Canal near the harbor, rather than use the short airstrip.

E. SMALL BOAT HARBOR

A 100 berth Small Boat Harbor constructed at the mouth of Whittier Creek in 1971-72. State funded The most of the harbor project and it was immediately filled to capacity. In 1980, the State provided construction funds to expand the harbor to 332 berths. It was immediately again filled to capacity. Based on demand projections, chiefly from boating



Whittier Small Boat Harbor

(Harbormaster's office center right, "Triangle" merchants upper right).

enthusiasts in Anchorage, and as evidenced by multi-year waiting lists for berthing space, it is clear there is a large and growing demand for more commercial and recreational harbor space. Further expansion of this harbor is currently being examined by the Corps of Engineers under a contract for the upland expansion of the Small Boat Harbor funded in part by the State and Railroad.

The City operates the harbor through a lease agreement with the State Department of Transportation and Public Facilities (DOT/PF). A staff of five provides all essential harbor services and works to ensure the harbor runs efficiently and serves the needs of harbor users.

Most of the harbor's available berths are rented by Anchorage recreational boat owners. Local charter boats, and an increasing number of fishing boats and two tugs which service the rail-barge operation also regularly berth at or use the harbor. In addition, the harbor experiences short-term use from recreational boat-owners who bring their boat in by train or who dry-dock their boat in Whittier.

The major facilities constructed along with the harbor include a harbormaster office, a 25 ton boat lift and dock, two boat launching ramps, electrical and water service facilities and marine fuel service depot. A third boat launching ramp is planned south of DeLong Dock. Upland (dry-dock) commercial boat service areas are located adjacent to the harbor, but are limited due to space demands.

The engineering firm of Peratrovich, Nottingham & Drage has recently completed a careful examination of the harbor and its capability and demand for expansion. They determined there was substantial unmet demand in Anchorage of between 1500-2000 berths for recreational vessels, let alone future requirements for larger vessels in the tourism trade and for fishing and industrial uses. Such demand was not dependent on improved access from Portage.

On this basis, specific recommendations were made to expand the harbor landward by excavating 720,000 cubic yards of gravel at an overall construction cost of \$10.4 million. This would accommodate 380 boats, as well as a boat grid, fisherman's dock, fuel float and haul-out facilities. A smaller concept for 174 boats with the same associated harbor improvements was estimated to cost \$7.1 million. It was also suggested that the harbor could be modified to the east by removing the existing city dock & AMHS ferry dock and excavating 285,000 cubic yards of gravel. This would provide space for 108 large scale boats, including 10 glacier tour boats, at a cost of \$6.5 million.

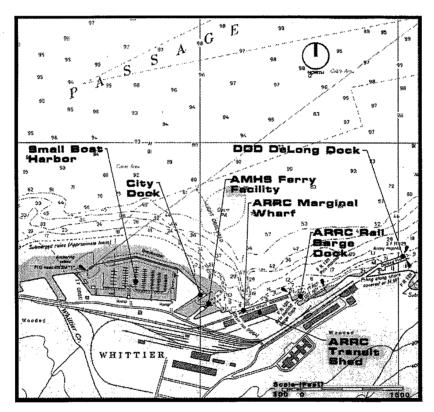
F. PETROLEUM-OIL-LUBRICANT (POL) LINE

A system of POL pipelines runs between the Whittier port and Elmendorf Air Force Base in Anchorage. Managed by the Department of Defense, the system provides petroleum products for the military throughout Alaska. Four 12-inch lines follow the road from the Whittier port to the Defense Fuel tank farm at West Camp. A single, high-pressure, 8-inch line passes through Maynard Mountain in a tunnel just north of the Railroad tunnel. The pipeline crosses beneath the Railroad at portal 2 of the Whittier tunnel, crosses Bear Valley and under Placer Creek, passes around Begich Peak at the shore of Portage Lake, crosses beneath the Railroad again at portal 4 (the Portage tunnel), and follows the Railroad to and beyond the Portage staging area.

Chapter VI Current Economy and Potential Growth

Whittier's present economy and prospects for future growth are directly related to its location in Prince William Sound. The community's economy is described in five separate segments: Recreation/Tourism, Fishing, Marine Services, Government and General Commercial Services.

There has been substantial new information about potential economic expansion in Whittier if there is improved access as a result of the Whittier Access Project. This information is offered in each section to describe potential growth in order to understand potential changes in the community that must be addressed in this Comprehensive Plan. A final section addresses conclusions about future economic growth if new access is provided.



Current Whittier Town Core Waterfront Facilities

A. RECREATION/ TOURISM

Travel and tourism have grown substantially in Alaska, increasing visitor traffic and sales throughout the state. The number of summer visitors to Alaska has increased by nearly 200,000 since 1985, a total increase of 40%, an average annual growth of just under 5%. The Destination Alaska report projects a summer visitor growth rate of 4.1% to the year 2000 and a full-year visitor growth rate of 3.4% in that same time.

Travel to the Southcentral region, the point of origin for Whittier travel, has been growing at a slightly faster rate. While recent figures are not available, Southcentral visitors increased at a 6% annual rate between 1985 and 1989, and now account for a higher proportion of all visitors to the state than in 1985. The majority of these visitors travel to Anchorage and the Kenai Peninsula.

Local area population has also been an important factor with respect to recreation-related travel in Southcentral Alaska, and historically the Anchorage area has grown substantially. Projected Anchorage and MatSu resident population growth rate through the year 2015 remain conservative, however. ISER predicts a base scenario of 2% population growth to 1995 and a 1.3% growth to 2015. Population growth will continue to reflect the mixed economic news throughout the state.

Whittier has become a center of tourism-related marine uses because it is the nearest year-round ice-free port to Anchorage and provides the closest recreational access to Prince William Sound for most of Southcentral Alaska. Whittier's present economy is mostly based on its marine location and the multiple use of its port and Small Boat Harbor facilities.

The community has reason to believe that it should enjoy a growing economic base from recreation and tourism, based on these positive reports about this industry generally. Indeed, greatly improved visitor traffic in Whittier has occurred since the establishment of the Gateway Visitor Center at Portage, operated by the Prince William Sound Tourism Coalition, in partnership with the Kenai Peninsula Tourism Council.

There is little statistical information available on recreational and tourist use of Whittier. A kiosk in Whittier maintained by the Glacier Ranger District, which serves as a community visitor center and gift shop operated by the Older Alaskans of Whittier, is noted as catching the attention of 12,000 individuals. This number of individuals is some indication of the large number of tourist and recreation visitors that pass through Whittier in the summer. Whittier is less a destination in itself than it is a transfer point between the railroad and the state ferry system or between the railroad and charter or personal vessels. It has few rooms for guests. The Sportsman's Inn and Anchor Inn in Whittier have a total 36 rooms and two restaurants. There are four other seasonal eateries.

<u>Day Cruise and Charter Operations</u>. A growing sector of Whittier's marine economy is the summer recreational and tourist charter boat business. There are at least 12 to 15 regularly operating charters. The major operators are Phillips Cruises, which operates the Klondike (275 passengers), Holland America Westours, Alaska Sightseeing and Major Marine. Most of the charter operations are owned by Anchorage residents so booking arrangements usually occur in Anchorage. The charters are normally hired for short duration trips, 1-3 days or only several hours. Main charter activities include sightseeing, camping, kayaking and recreational fishing in the Passage Canal area. This business activity generates a small number of seasonal jobs in Whittier.

Cruise Ship Operations. Another private use of the port area has been the cruise ship business. In 1985, there were about 35 cruise ship stops, and in 1992 it reached over 50. Because of many factors, the industry removed itself in 1993 to Seward. With improved access from Portage, this plan assumes they will return, but other factors play in this decision, including necessary upgrades to the Marginal Wharf and Marginal Wharf Building. While the cruise ships operated in the Whittier area, the major impact on the local economy was cruise ship employees staying in Whittier for short periods and buying local goods and services. Restaurants and bars increased their opening hours, providing more employment and capturing more cash for the local economy. The passengers, however, spent little time in the community. The tour package itinerary did not include activities based out of Whittier, suggesting that more amenities in the community are required. The largest impact to the community was that some local residents had short-term jobs to assist in the on-and-off loading of passengers and docking of the cruise ships.

The Alaska Marine Highway. The State of Alaska runs the M/V (merchant vessel) Bartlett, a passenger and vehicle ferry that crosses Prince William Sound between Whittier, Cordova, and Valdez. On its Whittier leg, it is primarily popular for sightseeing, both with Alaska residents and out-of-state visitors. The Bartlett serves Whittier only in the summer - May through September - when tourist traffic is high. More than 10,000 passengers embarked from Whittier and another 10,000 disembarked at Whittier in 1992. The vast majority of these passengers were on trips to or from Valdez, and relatively few were on trips to or from Cordova.

The Alaska Railroad. One of the best indications of use of the Whittier area by tourists and recreators is the difference in railroad shuttle ridership between winter and summer. Winter use is much more heavily weighted to residents. Summer sees the height of tourist traffic and is the prime season for on-water recreation. The following table shows that roughly 152,000 recreators and tourists use the train in the summer.

Esti	mated Recrea	itor and Touris	t Trafficon th	e Whittier Shuttle, 1992	
		Summer	Winter	Approx. Rec. Traffic	
	Total	May-Sept.	OctApr.	(summer minus winter)	
People	191,167	171,897	19,270	152,627	
Vehicles	20,105	15,752	4,353	11,399	

Estimate assumes winter traffic is primarily Whittier-resident and business traffic and that this level remains relatively constant throughout the year. Numbers reflect number of one-way trips.

Source: ARRC ridership tables 1992.

ARRC has indicated that the 1993 and 1994 ridership figures appear to be very similar to 1992, despite the reduction in cruise ships landing in Whittier. (In 1992, 52 cruise ships stopped in Whittier; in 1993, only 17 stopped. None are expected to stop in 1994.) Because ridership remained similar and because many cruise ship passengers are not included in the 1992 ridership numbers anyway, the table should be indicative of future use, so long as cruise ships do not call at Whittier. In the past, several cruise lines arranged special charter trains for their passengers instead of putting them on the

scheduled shuttle. There were 50,869 passengers accommodated on special charters throughout the railroad system in 1992, and well over half are estimated to have been Whittier cruise ship passengers.

Pleasure and Commercial Boating. The Whittier Small Boat Harbor has 332 slips. It is full, so the City must work to maximize transient users when slips are unoccupied to enhance revenues. The Harbor enjoys a lengthy waiting list, for which people must pay to retain their position. This long list has existed for many years. As of December 1993, the waiting list contained 316 names. The 1993 Whittier tax roll for boats in the harbor lists 353 boats, with some stored in either of two dry storage areas and some double berthed in slips. Approximately 290 of those boats are pleasure boats. Demand for additional pleasure boat slips is thought to exceed 1,000 (U.S. Army Corps of Engineers and Peratrovich, Nottingham & Drage 1993).

Of approximately 62 commercial boats, at least 14 are thought to be charter boats serving tourists and recreators (City of Whittier 1993). The others are smaller charter operations that run tours and drop off kayakers, hunters, and people with cabin reservations in western Prince William Sound. Most of these have the ability to operate with up to six commercial passengers.

<u>Camping</u>. A recreational 21-space vehicle campground has been established by the City of Whittier on leased ARRC land near Begich Towers in the Whittier townsite. There is no information on its use each summer, but its use is not extensive, given its primitive conditions.

<u>Hiking and Skiing Trails</u>. A trail leading toward Portage Pass from the Head of the Bay in Whittier is listed as a hike in the hiking guide,"55 Ways to the Wilderness in Southcentral Alaska" (Nienhueser and Simmerman 1991). The route is also reportedly used by mountain bikers. The route over the pass is used in winter by back-country cross-country skiers.

<u>Prince William Sound</u>. Passage Canal and the fjords and coves of western Prince William Sound are popular with recreators, whether they see them from cruise ships or from self-propelled sea kayaks. Recreation resources in the sound include fish, wildlife for hunting and viewing, wilderness scenery, state marine parks, public cabins, remote coves and beaches for camping or anchoring boats, areas managed as wilderness, and protected waters for boating. Resource management agencies view the Sound as wilderness, as do tour operators in the Sound, and they believe this perceived or real wilderness quality is what attracts tourist and recreators to the Sound. Recreational boating in the Sound is attractive, because the waters are more protected than other popular boating areas, such as Resurrection Bay, Kachemak Bay, and Cook Inlet.

There are several types of recreation groups in the Sound, each with somewhat different needs. There are independent and commercial types of recreation. Independent recreators are mostly residents of Anchorage and other cities in Southcentral Alaska who kayak, sail, motor boat, fish, or hunt out of Whittier.

The best statistical measures of recreational uses of the Sound, and potential future uses, comes from the USFS. Portage Valley and the Begich Boggs Visitors Center are the most popular destination, and are the most heavily visited tourist destinations in Alaska with over 600,000 visitors per year. These areas, valued by recreators and tourists primarily for their scenic qualities, are popular with Anchorage residents, other Alaskans, and visitors from outside the state. The use of Whittier for recreation and tourism is inextricably tied to recreator and tourist use of western Prince William Sound, because the port of Whittier is the main entrance to the western Sound. While some recreation and tourism uses are difficult to quantify, USFS standards show the overall area's summer use is primarily recreational and that the recreation and tourism "environment" is critical to USFS District-wide uses.

The U.S. Forest Service tracks use in recreational visitor days (RVD) per year and defines an RVD as 12 hours of visitor use, whether by one person for 12 hours or six people for two hours each. Total annual RVD from 1990 to 1992 for the Glacier Ranger District as a whole has increased from 725,800 to 803,400 RVDs. The top use category is called "mechanized travel and viewing of scenery." "Mechanized travel" includes use of private automobiles, tour boats, the state ferry, ships, and buses. For 1992, the Forest Service reported this category at 67.5% of the total RVDs.

Recreation and Tourism Use in Glad	cier Ranger District
Activity	Recreational Visitor Days
Mechanized Travel/Viewing of scenery	542,000
Camping/Picnicking	29,800
Hiking/Biking	18,700
Fishing	15,900
Hunting	7,000

The USFS defines one Recreational Visitor Day as 12 user hours. Source: USFS Recreation Information Management (RIM) studies in 1990, the last year Chugach National Forest figures were recorded in detail.

<u>Potential Future Growth of Recreation/Tourism in Whittier</u>. Those economists who have examined the potential future growth of Whittier focus on the prospects for this industry. In the documents developed to support the Whittier Access Project, the improved rail access alternative indicates a threefold increase in visitors in the decade after the access is provided, up to as many as 600,000 persons.

Improved road access is even more dramatic. If no toll is assessed, the high use estimates suggest the following demands within 20 years: (1) 251,000 annual persontrips to serve resorts and lodges, (2) 277,000 persons in boating, (3) 107,000 persons in charters and tours, (4) 628,000 persons arriving via Portage Glacier for day trips, (5) 122,000 persons from cruise ships, (6) 1,098,000 persons diverting from trips to or from the Kenai Peninsula, (7) 42,000 persons from the ferry system and (8) 47,000 others. When local residents who use the road are included, such projections indicate 1.7 million persons will come to Whittier each year when the road opens and 2.8 million persons by the year 2015. Without cruise ship or lodges, the low case projection is between 1.2 million and 1.5 million persons in the same time frame.

More specifically, if improved rail service is provided, the following changes are projected to occur in Whittier by the EIS consultants.

1. <u>Resorts and lodges</u>: Development of an 80 room lodge, 75 cabins, and 90 condominiums could occur by 2005. Full build out of a development with 240 rooms, 200 condominiums, and 75 cabins could occur by 2015. This development generates 60,000 visitors to Whittier in 2005 and 125,000 visitors in 2015.

2. Boating:

Moored Boats. Approximately 13,000 visitors are estimated in 1997. Moorage slips should increase by 400 in 2005 if new harbor facilities are built. An additional 350 slips should be developed in 2015. These projects account for an additional 16,000 visitors to Whittier in 2005 and an additional 14,000 visitors in 2015.

Trailered Boats. The number of visitors associated with trailered boats is calculated assuming a fee of \$45, which reduces the demand to 20.6% of the potential demand without tolls or fares. The number of visitors to Whittier in 1997 is estimated at 11,000.

Total. Total visitors associated with boating under this alternative are estimated at 24,000 in 1997.

- 3. <u>Charters and tours</u>: This category is assumed to increase at 6.5% per year through 1999, and 3.25% per year thereafter. The estimate of 37,000 visitors to Whittier in 1997 uses 1.5 person trips per visitor.
- 4. <u>Portage Glacier</u>: Approximately 5.9% of the visitors to Portage will travel to Whittier even with a toll fee of \$45. This number is assumed to increase at 2.9% annually. About 27,000 visitors would travel to Whittier in 1997.
- 5. <u>Cruise ships</u>: One-third of the cross-gulf cruise ship traffic projected in the Southcentral Port Development Study is assumed to move through Whittier, assuming a rebuilt railroad dock and improved rail access are available in 1997. This traffic is projected to increase at 4.3% annually through 1999. This percentage is the projected growth in cruise ship passengers. After that date the annual growth rate decreases to 2.15%.

The crews of cruise ships are given leave while in Whittier. The size of the crew on the cruise ships is about one-third the passenger capacity. Passenger loads are counted twice in Whittier (embarking and disembarking passengers) and a 900-passenger vessel could account for 1,800 passengers when it calls at Whittier. The number of visitors associated with a crew for a vessel of this size (300) is one-sixth of the total passenger count.

Cruise ship visitors, including crew, total about 59,000 in 1997.

- 6. <u>Kenai Peninsula</u>: The number of visitors to Whittier for this group of travelers is based upon survey responses with a \$30 round trip vehicle toll. This reduces potential demand to 0.925 trips per traveler per year. The number of visitors increase at the high population growth rate of 2.9%. This results in about 51,000 visitors for this category in 1997.
- 7. <u>AMHS Ferry System</u>: Improved shuttle service does not result in additional traffic, but ferry service is assumed to increase at the 2.9% rate of regional population growth through 1999 and 1.45% after that date. This component accounts for 23,000 visitors in 1997.
- 8. Other Visitors: This category includes 5,000 visitors for additional commercial and industrial uses (such as trucks hauling fish to plants in Anchorage and additional trucks hauling supplies for increased community population and economic activity), fishing boats, and other miscellaneous uses during 1997 and 1998. This total then increases at the same percentage rate as total visitors in the prior year.
- 9. <u>Population</u>: The population of Whittier is assumed to increase at 2% through 1996, increase at 3% annually from 1997 through 2007, and 1% per year for the balance of the study period. The population in 1997 will be about 300 under this scenario.
- 10. <u>Summary</u>: The following table summarizes the number of visitors and the population estimates for Whittier if improved rail access is provided:

IMPROV	ED RAIL ACCES	SS: F	PROJECTED NUM	IBER OF ANNUAL	VISITORS AN	D WHITTIER I	POPULATIO	V.		
Year	Destination Lodge	Boating	Charters/ Tour Operators	Sightseeing Portage Glacier	Cruise Ship Visitors	Kenai Peninsula Travelers	Ferry System	Other Users	Total Visitors	Whittier Population
1997	0	25000	38000	27000	59000	40000	25000	5000	219000	300
1998	0	25000	40000	28000	61000	41000	26000	5000	226000	310
1999	0	25000	43000	29000	64000	42000	27000	5000	235000	320
2000	0	26000	44000	30000	67000	43000	27000	5000	242000	330
2001	0	26000	45000	31000	70000	45000	28000	5000	250000	340
2002	0	26000	47000	32000	73000	46000	28000	5000	257000	350
2003	0	27000	49000	33000	76000	47000	29000	5000	266000	360
2004	0	27000	50000	34000	79000	49000	29000	5000	273000	370
2005	60000	44000	52000	35000	82000	50000	29000	5000	356000	380
2006	60000	44000	53000	36000	86000	51000	30000	7000	367000	400
2007	60000	45000	55000	37000	90000	53000	30000	7000	377000	410
2008	60000	45000	57000	38000	94000	54000	31000	7000	386000	410
2009	60000	45000	59000	39000	98000	56000	31000	7000	395000	420
2010	60000	46000	61000	40000	102000	58000	32000	7000	406000	420
2011	60000	46000	63000	41000	107000	59000	32000	7000	416000	420

IMPROVED RAIL ACCESS: PROJECTED NUMBER OF ANNUAL VISITORS AND WHITTIER POPULATION											
Year	Destination Lodge	Boating	Charters/ Tour Operators	Sightseeing Portage Glacier	Cruise Ship Visitors	Kenai Peninsula Travelers	Ferry System	Other Users	Total Visitors	Whittier Population	
2012	60000	47000	65000	42000	111000	61000	33000	7000	426000	430	
2013	60000	47000	67000	43000	116000	63000	33000	7000	436000	430	
2014	60000	48000	69000	44000	120000	64000	34000	7000	446000	440	
2015	126000	63000	71000	46000	126000	66000	34000	7000	539000	440	

The EIS consultants project the following changes if road access is provided:

1. Resorts and lodges: Development of an 80-room lodge, 75 cabins, and 90 condominiums could occur by 2000. Further development of an additional 160 rooms and 110 condominiums could occur by 2010. This results in 60,000 visitors in 2000, and a total of 126,000 visitors in 2010.

2. Boating:

Moored Boats. Moorage slips are increased by 400 in 2000, and an additional 350 slips are developed in 2010. With the availability of road access in 1997, the number of annual trips per person to Whittier increase from 14 to 21 for this user group (Northern Economics 1993). This category accounts for 20,000 visitors in 1997 and 66,000 visitors in 2015.

Trailered Boats. Trailered boat trips increase at a 2.9% annual growth rate through 1999, with the growth rate reduced to 1.45% from 2000 on to account for competition from other areas, land availability, and infrastructure constraints in Whittier. This group represents approximately 54,000 visitors to Whittier in 1997 and 73,000 in 2015.

Total. Total visitors associated with boating are estimated at 74,000 in 1997 and 139,000 in 2015.

- 3. <u>Charters and Tours</u>: The tour package segment of this category is assumed to increase at 6.5% per year through 1999 and half of that rate for the balance of the study period. This 6.5% rate of growth is comparable to the estimated growth rate in the number of customers accommodated by this category between 1992 and 1993. The growth rate is reduced to 3.25% from 2000 on to account for competition from other areas, land availability, and infrastructure constraints in Whittier. The number of visitors to Whittier in 1997 is estimated at 38,000.
- 4. <u>Portage Glacier</u>: Approximately 53% of the 400,000 visitors to Portage Glacier will travel to Whittier if vehicle access were available without tolls or fees. The number of Portage visitors is assumed to increase at 2.9% per year through 1999. Growth is constrained to 1.45% after 2000 to account for competition from other areas, land

availability, and infrastructure constraints in Whittier. The number of visitors to Whittier in 1997 from this component is estimated at 236,000.

- 5. <u>Cruise Ships</u>: Whittier is projected to capture half of the cross-gulf cruise ship passengers in southcentral Alaska when vehicle access is available (assuming that the railroad dock is refurbished). Discussions with industry representatives indicated that new road access and a refurbished dock would need to be completed before this number of cruise ship calls would occur. Passenger volume is projected to increase at 4.3% annually through 1999 and 2.15% over the balance of the study period. Total cruise ship passengers and crew are estimated at 93,000 in 1997.
- 6. <u>Kenai Peninsula</u>: The number of visitors to Whittier for this group assumes vehicle access without tolls or fees. With free vehicle access, the number of annual round trips that the typical Kenai Peninsula traveler would make increases to 4.8 round trips per year per traveler. The annual growth rate for this category increases at 2.9% through 1999 and 1.45% after that year to account for competition from other areas, land availability, and infrastructure constraints in Whittier. Total visitors for this group are estimated at 412,000 in 1997.
- 7. <u>AMHS Ferry System</u>: The scenario associated with the road alternatives increases at 2.9% annually from 1992 until 1996 and increases 25% in 1997 due to road access and reduced travel cost. Ferry traffic resumes its 2.9% growth rate in 1998. This rate declines to 1.45% in 2000. Total visitors associated with ferry traffic in 1997 is estimated at 31,000.
- 8. Other Visitors: The large number of visitors and increased population will require additional travel to serve and supply the community. This category includes 13,000 visitors for additional commercial and industrial users; fishing boats; economic development in Chenega, Tatitlek, and other locations in western Prince William Sound; and other miscellaneous uses during the first two years of operation. These numbers increase at the same percentage rate as the change in total person-trips between the two prior years.
- 9. <u>Population</u>: Under this scenario the population of Whittier is assumed to increase at 2% through 1996, increase 20% annually from 1997 through 2000 because of substantial construction and new employment, increase 5% per year for the next 10 years, and moderate to 2% after that time. Whittier population in 1997 is estimated at 360 under this scenario.
- 10. <u>Summary</u>: The following table summarizes the number of visitors and the population estimates for Whittier if new road access is provided.

	IMPROVED ROAD ACCESS PROJECTED NUMBER OF ANNUAL VISITORS AND WHITTIER POPULATION										
Year	Destination Lodge	Boating	Charters/ Tour Operators	Sightseeing Portage Glacier	Cruise Ship Visitors	Kenai Peninsula Travelers	Ferry System	Other Users	Total Visitors	Whittier Population	
1997	0	77000	38000	236000	98000	412000	31000	18000	697000	360	
1998	· 0	77000	40000	243000	98000	424000	32000	13000	924000	430	
1999	0	77000	43000	250000	101000	436000	33000	13000	953000	520	
2000	60000	102000	44000	253000	103000	443000	33000	14000	1052000	620	
2001	60000	103000	45000	257000	105000	449000	34000	15000	1068000	660	
2002	60000	104000	47000	260000	108000	456000	34000	16000	1085000	690	
2003	60000	105000	49000	264000	110000	462000	35000	16000	1101000	720	
2004	60000	106000	50000	268000	112000	469000	35000	17000	1117000	760	
2005	60000	107000	52000	272000	116000	476000	36000	17000	1135000	800	
2006	60000	108000	53000	276000	117000	488000	36000	18000	1151000	840	
2007	60000	109000	55000	280000	119000	490000	37000	18000	11,66000	880	
2008	60000	110000	57000	284000	122000	497000	38000	19000	1187000	920	
2009	60000	111000	59000	288000	125000	504000	38000	19000	1204000	970	
2010	126000	134000	61000	292000	127000	511000	39000	20000	1310000	1020	
2011	126000	135000	63000	296000	130000	519000	39000	22000	1330000	1040	
2012	126000	136000	65000	301000	133000	526000	40000	22000	1349000	1060	
2013	126000	137000	67000	305000	136000	534000	40000	23000	1366000	1080	
2014	126000	138000	69000	310000	139000	541000	41000	23000	1387000	1100	
2015	126000	139000	71000	314000	141000	549000	42000	24000	1406000	1200	

In summary, the improved rail alternative in 1997 may bring four times more visitors to Whittier than visited in 1993. Many, if not most, would be recreators. Increased competition for limited recreation facilities would likely impact these recreators, although growth in visitation by rail is expected to remain slow, allowing the public and private sectors time to analyze needs and react to meet those demands.

Impacts associated with the roadway alternatives would be greater. The number of visitors is expected to be ten times the number who now visit Whittier. Many, if not most, visitors would be recreators. Ten times more visitors could lead to as much as ten times the demand for recreation facilities shortly after a road opened, potentially outpacing the ability of the private sector, the City of Whittier, and other government agencies to respond. If the response lagged, impact to recreation could be significant. The impact to the City and other affected agencies would be moderate to major, depending on whether or not they were able to keep up with the demand. When facilities did approximately meet demand, recreators would realize a major benefit with a new recreation opportunity in Whittier.

The critical unknown factor is what response Whittier provides to capture such visitation to ensure that it returns and whether improved tourism statistics continue for the foreseeable future. The EIS writers assume significant amenities being provided in Whittier, like lodges, an expanded harbor, a commercial center, and the like. In cooperation with the Anchorage Economic Development Corp., the City recently participated in a study validating even further tourism expansion if a road to Shotgun Cove is constructed after improved access to Whittier from Portage is assured.

Using market analysis, City planners have estimated visitors in the community at one time - the visitor census - which is helpful to show the number of visitor parties that need to be accommodated for parking, services, etc. The census is related to visitor flow and because the bulk of visitors will be sightseers, their arrival and departure pattern strongly affects overall visitor census patterns. These findings show that during the middle of an average summer weekend day the visitor party census will reach about 870 visitor parties.

Another important issue for planning purposes is visitor expenditures and local employment. Expenditures of visitors to Whittier will depend to a large extent on the services and products that will be available within the community, but can be estimated using expenditure patterns that are typical for visitors to Alaska. It appears that, if road access is provided, within ten years total visitation and gross expenditures will reach over 203,235 annual visitor parties, and \$29.2 million in annual expenditures, respectively, as follows:

TOTAL WHITTIER VISITATION AND GROSS EXPENDITURES

		Gross Ex	penditures (\$000/	Yr)			
	Summer	Winter	Total	\$Pty/Day	Summer	Winter	Total
Resort	4139	1533	5672	367	1518	562	2080
Moored Boats	5791	1645	7436	81	472	134	606
Drystore Boats	1869	531	2400	81	152	43	196
Trailered Boats	15156	4306	19462	81	1235	351	1586
Charter/Tours	15097	0	15097	114	1722	0	1722
Cruise	14141	0	14141	189	2667	0	2667
Ferry	2990	849	3839	147	438	125	563
Portage Sight-seeing	45376	12892	58267	147	6655	1891	8546
Kenai Sight-seeing	64507	8024	72531	147	9461	1177	10638
Other	3418	971	4390	147	501	142	644
Total	172484	30751	203235		24821	4425	29246

Source: INTRA

The net impact of such visitation, in associated potential employment and payroll for Whittier, suggests an annual average of 207 employees can be expected from visitor expenditures. Because the bulk of this employment will occur during the summer, actual summer employment will be approximately 400 employees, declining to relatively few during the winter months. Because of these seasonal variations, it is important that the community look beyond this industry as its sole economic base. In addition, however, working proprietors would probably amount to between 50 and 100 individuals and it is expected that most of these proprietors would operate their businesses by themselves during the winter months, adding seasonal employees during the summer.

Payroll for these employees would amount to nearly \$4 million per year. A portion of this payroll would be spent within Whittier on housing, food, fuel and other purchases.

	Lodging	Transport	Tours/Rec	Food & Beverages	Other	Total
Resort	\$0	\$74	\$333	\$45	\$38	\$490
Moored Boats	\$38	\$43	\$38	\$56	\$63	\$239
Drystore Boats	\$12	\$14	\$12	\$18	\$20	\$77
Trailered Boats	\$101	\$112	\$99	\$147	\$166	\$624
Charters/Tours	\$0	\$0	\$76	\$66	\$73	\$216
Cruise	\$0	\$0	\$163	\$107	\$320	\$589
Ferry	\$0	\$0	\$14	\$52	\$59	\$125
Portage Sightseeing	\$0	\$357	\$902	\$641	\$944	\$2,844
Kenai Sightseeing	\$0	\$445	\$1,122	\$798	\$1,175	\$3,540
Other	\$27	\$27	\$68	\$48	\$71	\$24
Total	\$179	\$1,072	\$2,827	\$1,978	\$2,930	\$8,985
Percent Capture	2.90%	17.20%	44.10%	46.10%	47.30%	30.70%
Employees	6	42	44	81	34	20′
Payroll (\$000/yr)	\$102	\$1,396	\$637	\$1,197	\$651	\$3,98

Note: Employment and Payroll estimated using data from "Alaska's Visitor Industry," 1991

Source: INTRA

B. FISHING

The fishing industry in Whittier does not rival those of Cordova or Seward in volume of fish processed, number of fishermen and number and size of vessels in the fishing fleet, but it is a significant component of the local economy. However, the Sound has experienced a downturn in the 1990's in fish stocks and resulting fisheries-based economy, which has had an important negative economic impact in all communities in the Sound.

Local fishermen and those from other areas fish the bays of western Prince William Sound for salmon, halibut, bottom fish, shrimp, herring, kelp, king crab, tanner crab and dungeness crab. In the past, most of the fish landed were processed outside of Whittier. Whittier was mainly a place where fish buyers from Anchorage came during the summer fishing season. The growth of salmon hatchery production in western Prince William

Sound and increased utilization of the bottom fish resource has focused development of a commercial fishing industry in Whittier. In recent years, two large fish processor and buying operations located in Whittier and several smaller operators continue to do business.

Great Pacific Seafoods operates a fish buyer and processing plant in Whittier located across from the City shop building. The operation has been extensively renovated with the addition of new processing equipment. Most of the product is for the export market and a small amount is sent to Rail Belt markets in Alaska. In 1994, Great Pacific Seafoods processed twelve million pounds of fish product.

Fresh fish market sales to Anchorage restaurants and grocery stores have been increasing. Several local buyers are actively supplying this nearby local market.

While salmon is the predominant local fishery, several other species are utilized. There are about 15-20 local boats that long-line for halibut and they land about 60,000 pounds annually. Halibut sales are largely to fresh fish markets in Anchorage, but local sales do occur. The halibut fishing season is very short, with a few openings a year. This process is expected to change, with implementation of the IFQ system. About ten boats are active in the ling cod fishery which is open during several periods the year around.

The shrimp fishery has steadily declined over the last several years, and the length of the shrimp fishing season has also become progressively shorter. The fishery was closed indefinitely in April 1989.

About 5 local fishermen have salmon drift gillnet or purse seine commercial fishing permits. The amount of salmon caught near Whittier, however, is difficult to establish. More commercial fishermen would like to use Whittier as a base but the Small Boat Harbor lacks adequate docking facilities. Most of the salmon harvested is delivered to tender operators. Recently more commercial fishing has been taking place in western Prince William Sound. About 70 to 80 seiners and 150 to 200 gillnet boats were active in this area during the season. The easy and consistent availability of hatchery spawned fish on the west side of the Sound is drawing more boats out of traditional fishing areas near the Copper River delta.

The fish processing industry in Whittier was considered one of great potential in 1990. Nearness to the major population centers and international air transportation facilities, a steady supply of hatchery raised fish, and low electric rates suggest opportunities for development of this industry.

Several factors limit the size of and rate of growth of this industry in Whittier. The most immediate problem is the lack of adequate facilities to provide separation for the recreational and commercial boats. Although an increasing number of commercial fishing vessels are using the Small Boat Harbor, the harbor is not designed to accommodate larger vessels. Facilities are needed at the harbor to unload fish and supplies. Agreements allow use of the Ocean Dock and ARRC Dock for the unloading

of product. The use of these facilities will have to be carefully orchestrated in the future to avoid conflict with cruise ships, day tour boats and the weekly rail barge traffic which have priority.

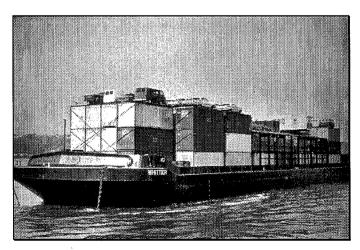
Improvements that would help expand Whittier serving as a commercial fishing port include: a larger dock to permit direct off-loading of fish, road access to Portage, or at least an expanded railroad schedule and lower commercial rates, more boat repair service, more berths in the existing small boat harbor that can accommodate commercial fishing boats or building the proposed commercial boat harbor.

Although there are impediments that hinder Whittier serving as a major fishing port, its west-side location on Prince William Sound, safe moorage and low electric rates should help to ensure it will continue to serve as a commercial fishing area.

C. MARINE SERVICES

Providing marine services accounts for most industrial, commercial and recreational/tourism employment in the community. Both the private and public sectors are involved in delivering marine services. The state ferry pays about \$5,000 per month during its 5 month operating season for docking help.

The port facility directly creates about 20 permanent industrial jobs. Crowley Maritime, the Alaska Railroad, Alaska Hydro-Train, Dojer Ltd. Inc. and Northern Management Services are the major private employers.



Crowley Maritime operates a rail-barge service with operations personnel stationed in Whittier and administrative support provided out of Anchorage. present, Crowley Maritime has about 8 permanent employees, none of whom live in Whittier. The main jobs are skippers, engineers and deck hands for its barges and tugs. The tugs at Whittier employ 6 marine workers and 6 on the beach crew. They generally run a capacity northbound but lack backhaul freight. The Canadian National Rail Road operates a barge every

ten days to two weeks into Whittier.

The Department of the Air Force has contracted out the tank farm operation to a private firm, Northern Management Services, since October 1989. Northern Management Services operates a fuel storage tank farm facility on the Head of the Bay and receives fuel via tanker at the Delong dock. The pipeline runs through a small tunnel adjacent to the Railroad tunnel. This facility is the primary fuel and product storage area to all

Alaska military bases. The tank farm has about 12 full time and 10 part-time employees stationed in Whittier, with an annual payroll that approaches \$450,000. The Alaska Railroad's Whittier operations are based on the port. The Railroad usually employs 5 permanent year-round positions and 5 seasonal, temporary position (6-9 months) in Whittier. In addition to its permanent work force, the Railroad uses occasional construction and maintenance employees. In the summer the railroad has two four person crews and two ticket agents operating the shuttle service.

Whittier's emergence as a tourist, recreational boating and commercial fishing center contributes to a modest amount of marine service support employment. At present, there is a marine fuel service, a marine repair and welding service, a dry boat storage facility, several self-storage warehouses and about 13 licensed marine charter services. Whittier's commercial fishing industry is discussed in section (B) of this chapter.

Dojer, Ltd of Whittier provides delivery of supplies and materials to Western Prince William Sound utilizing two landing craft. Principal industries served are fish aquaculture and logging.

Shoreside Petroleum of Seward has operated the fuel service dock under City lease since 1992. It has a total storage capacity of 45,000 gallons and 1000 square feet of waterfront dock. The fuel service provides heating and automotive fuel to the community and marine fuel for recreational and commercial fishing vessels. Shoreside Petroleum usually employs 2 year-round and 2-3 summer season fuel dock attendants. A recent agreement between the City and Shoreside assures the harbor of \$ 160,000 in capital improvements during 1995.

A local resident has established a marine repair and welding service on the dry storage area near the fuel service dock. The shop provides on the spot painting, repair and construction for the recreational and commercial users of Passage Canal. The service is located in a large metal building which allows work to proceed regardless of the weather conditions. The ability to offer repair and maintenance in Whittier has significantly enhanced the City's role as a port for the Prince William Sound fishing fleet.

In 1989, a private developer repaired the old gymnasium in the center of Whittier to serve as a long-term boat and boat supply storage area. The structure was severely damaged during the preceding winter by heavy snow loads. The developer rents space to boat owners for protected dry storage. This project requires minimal operational and maintenance employment. There are several other warehouses in Whittier that provide marine self-storage areas, but these do not require any employees.

D. GOVERNMENT

The State and City governments are major employers, with a total of about 35 employees. The main government employers are the City, Chugach School District and U.S. Government. These employers generally offer stable year-round jobs.

CITY OF WHITTIER

In FY 1994, the City had 12 full-time employees and 3 part-time employees, with a payroll of \$ 547,936.00. Positions with the City perform the following functions: city administration, road, sewer and water maintenance, public safety and harbor services. The City also employs temporary personnel to perform, janitorial services and miscellaneous contract labor. Permanent positions are as follows:

PUBLIC SAFETY
Public Safety Director - Marshal (1)
Deputy Marshal (1)

PUBLIC WORKS
Public Works Director/Harbormaster (1)
Maintenance Man II (3)
Maintenance Man I (2)
Harbor Clerk (1)

CITY ADMINISTRATION
City Manager (1)
City Clerk (1)
Finance Officer (1)

HEALTH AND HUMAN SERVICES Clinic Clerk (1) PT

The potential expanded visitation to the City because of improved access will have a dramatic effect on the City revenues, as well as expense required to support the activity. In its recent report to the City, INTRA suggested \$4,000,000 in new revenue to the City if road access is provided, most of which would be provided in year-round jobs to provide City services.

CHUGACH SCHOOL DISTRICT

The Chugach School District is responsible for operating the Whittier, Whittier/Extension Program, Tatitlek, Icy Bay, Chenega and Two Moon Bay public schools and has 9 full-time or part-time employees that live in Whittier. These positions are as follows: a Principal, 3 Teachers, Pre-school Teacher, Library Aide/Breakfast Cook, 1 teacher's aide, Secretary, Maintenance Person and a Custodian. Total annual payroll for the staff in FY 94 was about \$200,000.00.

The School will presumably expand as the number of residents do. INTRA indicates the potential for 1200 -1500 residents in 20 years, which means the school age population and professional staff at the school would increase five fold.

U.S. GOVERNMENT

In addition to Department of Defense operations at the harbor and tank farm, described above, another government contract position in Whittier is at the U.S. Post Office. A local resident has a contract to operate the Post Office 3 days a week for 6 hours a day.

E. GENERAL COMMERCIAL SERVICES

The number of consumer service related businesses in Whittier has increased. Major businesses include two hotels, two restaurants, several seasonal eateries, three small general stores and two condominium ownership associations. In addition, there are a variety of small businesses that residents operate as secondary (cottage) industries.

The two hotels are the Sportsman's Inn and the Anchor Inn. Both are locally owned and located in the main section of town in the Whittier Core. The Sportsman's Inn has 20 hotel rooms and a bar, restaurant and laundry facility. The package liquor store has been relocated to the Harbor area. The complex's summer staff is usually 8 - 10 employees, but it declines to 4 in the winter.

The Anchor Inn has grown into a major complex. It now has 20 rooms, 4 efficiencies, 2 one bedroom apartments, a dorm down stairs for cannery workers and a bar and restaurant. The Anchor Inn normally has about 8 employees. The Anchor Store is composed of a sizable grocery, apartments and laundromat.

In addition to the restaurants at the hotels, there are several eateries located in the harbor apron area. The Hobo Bay Trading Company, Swiftwater Seafood, Tsunami, Irma's Outpost, Orca Cafe, Anchor Unlimited and Lisa's Ice Cream Parlor are locally owned and operated.

The Harbor Store is located in the harbor area. It opened in June, 1981, and is a year-round family operated business. The Harbor Store has boat supplies and groceries. Log Cabin Gifts offers carved items, art and curios for visitors. Honey Charters has constructed a log cabin in the triangle area as a base for its operations.

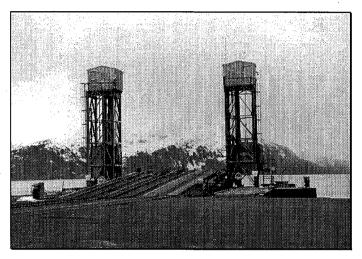
Local businesses located in Begich Towers include the Country Store and Cabin Fever Cures. In addition, there is a cottage home industry, where business is done through direct sales without a store-front to attract customers. The availability of these services are usually advertised on local bulletin boards and by word-of-mouth.

The growth of local businesses in Whittier has boosted the circulation of payroll money in the City. Much of the local payroll goes to Anchorage and therefore out of the Whittier economy. With the addition of basic employment from fish processing, the capture and recirculation of money in the local economy is important. The number of

business licenses issued has increased due to enforcement of regulations requiring those doing business rom outside the City to be licensed.

There are two condominium associations in Whittier. The Begich Towers, Inc. (BTI) is operated by the Begich Towers Homeowners Association, a non-profit corporation. It employs 4 maintenance staff. The Whittier Manor Association manages the Whittier Manor; its only staff is a part-time manager and a full-time maintenance person.

access is provided, expansion to every commercial service in the community is projected. A new hotel could be constructed and shopping and other commercial ventures would greatly expand. As marine and commercial functions expand, more people would seek to reside This could mean in Whittier. residential construction on a large scale, as the current housing facilities could not accommodate five-fold growth.



Alaska Railroad Barge Loading Facility

F. SUMMARY

A large part of Whittier's present economy depends on government jobs and government funding sources. The City, School, Northern Management Services and Alaska Railroad provide about two-thirds of the year-round permanent jobs. Other employment opportunities including, restaurants, seafood processing, commercial businesses and fishing, are largely seasonal or short-term. However, unless new access to Whittier is provided from Portage, the current employers show signs of limited growth. While Whittier's economy is viable during the short summer recreational boating season, it must rely on the dwindling business generated by its residents in the winter.

The City's efforts to attract businesses to create additional jobs and increase the tax base in the community is presently constrained by the cost and frequency of access. Improved access would probably enhance the recreation/tourism season, permit the existing fish processing businesses to be more competitive, and improve the business climate for firms considering expansion or relocation to Whittier.

There is concern that the capacity of the existing infrastructure and available government services in Whittier cannot accommodate an increased population and larger number of visitors. The City of Whittier presently is in poor fiscal condition and has limited ability to respond to such infrastructure requirements.

The City is presently able to generate general fund revenues that are comparable to its expenditures. Small increases in local taxes or minimal reductions in expenditures may be required to balance future revenues and expenditures. Revenues presently generated by visitors do not cover the cost of services provided to these users particularly because the Railroad pays no taxes, yet transports nearly all the people and goods to and from the City. Increasing numbers of visitors result in larger deficits.

The response of Whittier businesses to more convenient rail access or new road access is expected to generate additional employment and associated population growth in the community with the impacts very dramatic if road access is selected. These facilities and services will attract a larger number of visitors. Local taxes and population-related transfers from the state generally provide adequate revenues to pay for services and facilities necessary for residents. The City's current tax structure and tax rates are not likely to generate revenues adequate to pay for services and facilities used by visitors. Additional commercial, residential, and harbor development would result in larger property tax and sales tax revenues, but it is not anticipated that these revenues would offset the costs of the associated visitors in the short run.

Infrastructure development typically requires several years to complete from the time it is planned to the end of construction, and expenditures are required during that time. Related tax revenues, however, are generally not available until after construction is completed. Financing mechanisms can offset some of this timing difference, but the City's fiscal situation may decline until additional revenues come on line. These demands would have a major impact on Whittier's fiscal condition. Any future economic development plan must provide measures which mitigate revenue timing differences.

Whittier's economy will always be subject to seasonal fluctuations, due to weather and other factors, particularly because a significant area for potential growth is as a tourism/recreation center for day tours and cruise ships. To minimize seasonal fluctuations, the community needs to focus on year-around employment in industrial & marine uses. The community has benefited from increased recreational development, but continued growth depends on improving access to Whittier, responding effectively to that access, and then developing the proposed Shotgun Cove road and harbor projects. These projects are important to not only Whittier but to all Alaskans. These improvements will provide suitable access to Prince William Sound from the Railbelt for the first time.

FUTURE OPPORTUNITIES

The spectrum of opportunities is much broader than the range of needs. Whittier's future opportunities are primarily associated with taking advantage of the recreational and visitor markets by capitalizing on its strategic location on Prince William Sound assuming improved access from the most populated and visited area of the state.

It is likely that as regional residents become aware of Whittier's accessibility, they will also begin to explore the area's land based scenic and natural resources: through day hikes to Emerald Cove and overnight trips to Shotgun Cove and Decision Point. Such

recognition of Whittier's land-based recreational resources would benefit the community and perhaps would accelerate funding of an all-weather access road to Shotgun Cove.

Potential opportunities may also be identified in connection with Whittier's deep sea harbor that will be connected with the highway network of Alaska.

Early seasonal business opportunities are seen in the following areas:

- * Land development and construction,
- * Professional services to the growing resident community,
- * Boat maintenance and repair associated with a growing fleet of recreational craft,
- * Operation of covered dry boat storage and hoist facilities,
- * Boat chandlery, sail loft, and fishing tackle,
- * Retail commercial services to a growing resident and visitor market,
- Cruise ship dockage,
- * Increasing sightseeing day cruise operations,
- * Increasing recreational kayaking operations (subject to access restrictions in the Sound),
- * Guided wilderness tours associated with Emerald and Shotgun Coves and Decision Point,
- * Operation of a successful waterfront motel/boatel,
- * Streamlining the ARRC rail operation to free up some land for other important functions,
- * Creating more taxable, revenue-producing real estate,
- * Generating more varied and extensive municipal income,
- * Creating a distinct identity for Whittier as a community of interest with broad visitor appeal.

Chapter VII Land Ownership, Use and Management

Whittier's future as a viable city depends on creating improved access to the community and providing facilities for visitors which adequately respond to that access. However, how local lands are used and managed will also play a major role. To date, there has been little private and nonfederal land that has been developed or been available for development within the City limits. In fact, most development is confined to the Whittier core area, with minor improvements at the Head of the Bay.

There have been several major events which significantly affect land ownership and use in the community. These actions include: Federal land transfers to the State, State land transfers to the City, Federal/State land transfers to Chugach Alaska Corporation and transfer of the Alaska Railroad from Federal to State ownership. In addition, the City is considering disposal of some of its land once they are received from the State.

As a second class city which has assumed planning and land use regulation powers, Whittier can have a major role in guiding land use within its boundaries. The City has adopted a Coastal Management Plan, city wide zoning and subdivision ordinances and a 1990 Comprehensive Plan. By using these tools and the measures identified in this plan, Whittier can effectively manage land use and provide facilities and infrastructure required to respond to improved access. In this Chapter, land ownership, present land use, future land use, land use regulation and land management are described.

A. LAND OWNERSHIP

The Whittier City Limits consist of 17 sections or approximately 17 square miles. However, much of this is water or glacier. Total land acreage is less than 8,000 acres but only a small portion of that is developable. Instead, much of the land area within the City Limits is steep with little potential for development. See the High Altitude photo included in this Plan.

State of Alaska

A major landowner within the City Limits is the State of Alaska. Through a 1983 National Forest Community Grant Selection, the Federal government transferred title to 5,025 acres in Whittier, particularly along the coastline of Passage Canal and in the Shotgun Cove area, to the State. This grant selection also stipulated the transfer of 100 acres of the land the State received to Chugach Alaska Corporation and, in a subsequent legislative action adopted at the time, 600 acres to the City of Whittier.

The State received additional lands, most of which are in the Whittier core area, when it assumed ownership of the Alaska Railroad from the Federal government in January 1985. The state owns some of the tide and submerged lands in Passage Canal. Development of many of the upland areas in the City will require the use or modification of these lands.

Therefore the State, through the Alaska Railroad and its Department of Natural Resources, holds the key to the development of new areas in the City.

The ownership of tidelands within the Small Boat Harbor and along the waterfront in the town core area is disputed between these two entities. The City has attempted to resolve this dispute as a mediator, but legal positions heretofore taken by these two State agencies has precluded resolution. As a result, the federal government has been unwilling to pass title to either, effectively impeding further development of the Whittier waterfront.

The City continues to actively pursue solutions to this dilemma. One option adopted by the Alaska legislature in the 1995 session allows the City to obtain the Department's title to all developable tidelands within the City limits. If this were done, it is assumed a prompt solution could be negotiated with the Railroad that would allow transfer of tidelands from the federal government. A Memorandum of Understanding is now under consideration by the Railroad, State and City to identify a new harbor tidelands line as a compromise, which will allow the BLM to finish the plat of the harbor area and convey the land for ultimate ownership as identified in the Memorandum.

City of Whittier

Land with potential for development is a rare commodity in Prince William Sound, yet the City of Whittier has a significant opportunity, as it is in the process of obtaining control to key developable upland acreage. However, development of any lands outside the core area will require a large expenditure for improvements such as water, sewer, roads and electricity.

The City is now the second largest landowner within the City Limits. During the 13th session of the Alaska Legislature, legislation was adopted to transfer 600 acres of Federal lands received by the State directly to the City. The Governor signed this legislation into law on June 1, 1984.

As a result of the legislative action in 1986, the City received working title to 228 acres in the Emerald Cove Subdivision (sections 8, 9, and 17) pursuant to ADL 222791. It has recently obtained similar working title to 372 acres in the Shotgun Cove area (sections 10, 11, 14, 15, 16, 21 and 22) pursuant to a more recent adjudication in 1994 of these lands under ADL 222791 and ADL 224560. Such action also closed all 600 acres to mineral entry. In order for the City to obtain patented title to these lands, the federal government must complete patent to the State, and then the City may survey the lands for ultimate and final patent to the City. The City is required to sell lands not needed for public purposes within ten years of receiving title, or by the year 2004.

Under amendments to the Municipal Entitlement Act, a review of state land within the City was conducted. The Department of Natural Resources found that there were 1,142 acres of state land within the City between September 10, 1972 and January 1, 1988 all of which were vacant, unappropriated and unreserved. This meant that the City had an entitlement of 10 per cent of this land or 114 acres. The Department determined that

Whittier's 114 acre entitlement was fulfilled by the legislative grant, so it will remove the reversion restriction of 114 acres of the 600 acre grant. The remaining 486 acres still carries the requirement for sale by 2004.

At present, the only land the City has fee simple title to is a few small parcels in the Whittier core area. These are lands the City purchased through the General Services Administration (GSA) when the U.S. Army ended its Whittier operations and sold off its property.

Chugach Alaska Corporation

In December 1982, Chugach Alaska Corporation reached an agreement with the Federal government for entitlement lands they were to receive through the Alaska Native Claims Settlement Act. In receiving title to these lands, the Corporation is now the third largest landowner in Whittier, and it holds even more extensive holdings throughout the Sound.

Chugach Alaska Corporation owns two areas within the city limits. One is 400 acres in Section 18, located just east of the Whittier core area. The right-of-way the proposed Shotgun Cove road passes through this area. The second area is 100 acres in two locations near the site of the proposed Shotgun Cove harbor.

In recent meetings with the City, Chugach Alaska officials have shown clear support for construction of the Shotgun Cove Road and a joint development with the City of lands within the Cove. Such development was scrutinized in a 1993 report by International Tourism and Resort Advisors (INTRA) for the Anchorage Economic Development Corp. (AEDC).

At the same time, however, Chugach Alaska Corporation and its individual shareholders continue to express concern about indiscriminate use of Native lands in the Sound. Such use, which is trespass on private land, needs to be better controlled in order to facilitate effective recreational use of the Sound in the future.

Federal Government

At one time, the Federal government was the sole landowner in Whittier. However, with the transfer and sale of its land to the State, the City and Chugach Alaska Corporation over the last fifteen years, the Federal government is now a significant, but minor landowner. At present the Federal government owns some remaining lands in the Chugach National Forest, especially at Trinity Point, the DOD dock along the eastern waterfront of the town core, and lands at the tank farm in the Head of the Bay.

Privately owned and leased lands

There are a small number of parcels of lands, less than 250 acres in all, owned by private interests (this total does not include lands owned by Chugach Alaska Corporation). Most of these lands are in the Whittier core and the Head of the Bay, with the remainder located along the beginning of the Shotgun Cove road.

The Head of the Bay lands are owned by an Anchorage-based developer and were purchased through a GSA auction. This developer has little contact with the City and any options for future use of the tract presumably await further development in the area. Most other private lands were purchased from prior land sales by the City. The amount of lands in private hands will of course increase if the City disposes of any of the 600 acres in State land it has received, as it is required to do by 2004.

Much of the presently developed land in the town core is leased, not owned, by the land user. The Alaska Railroad is the major landowner that leases its lands for other uses. These leases were entered prior to the Alaska Railroad's transfer from the Federal to State government.

The Alaska Railroad has seven leases in the Whittier Core area. These leases are as follows:

- * The Railroad leases upland areas to the State Department of Transportation (DOT/PF) for the Small Boat Harbor. The State then leases the harbor area to the City. The Railroad lease to DOT/PF expires May 26, 2026; the DOT/PF lease to the City expires in 2005.
- * BRIC Inc., which operates the Sportsman's Bar and Restaurant, leases the area its operation is located on. The lease expires on January 1, 2020.
- * The Whittier Condominium Association leases the land the Whittier Manor is located on, and it also expires on January 1, 2020.
- * Dojer, Ltd., leases land on the west end of the Railroad siding yard. The lease expires on 2026.
- * Great Pacific Seafoods leases the site of its operation. Its lease expires in the year 2039.
- * Major Marine plans a new dock facility, and a short term lease has been negotiated at the Marginal Wharf.
- * The Espresso stand operated by the Jones Brothers near the shuttle embarkation point is another short term authorization.

In the Head of the Bay, the Alaska Railroad has the following leases:

- * Lease to the State Department of Transportation for an airstrip. The lease will expire on November 15, 1998.
- * Alaska Industrial, an Anchorage based firm, leased about 16 acres to use as a coal port. They prospectively entered the lease with the intent of getting a coal

contract between Usibeli Coal, at Healy, Alaska and Sun Eel Alaska, a Korean electric utility, and then using Whittier as a transshipment point for several million tons of coal to Korea. However, in early 1984, Seward was elected as the coal port site. Although the lease runs through May 1, 2034, it is probably now invalid, as Alaska Industrial's inaction on the coal port facility did not meet the specific performance requirement in the lease.

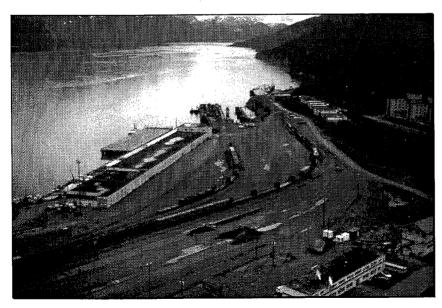
In addition to the Alaska Railroad leases, the U.S. Fish and Wildlife Service leases 37.87 acres in the Head of the Bay, adjacent to the U.S. Air Force storage tank farm, to the City. The lease was entered in March 1984. In the past, Whittier planned to use the land as a firing range.

A small parcel adjacent to the school is leased to the City from the Alaska Railroad for use as a camper park.

B. PRESENT LAND USE

At present, little more than 10% of the land in the Whittier townsite, or less than 1,000 acres, has been developed. Most of this development occurred during the U.S. Army's involvement during the 1940's, 50's, and early 60's, and it is mostly confined to the Head of the Bay and Whittier core area.

All of the initial development was to support the U.S. Army's military port operations. The Army constructed deep water port facilities, massive concrete warehouses, a tank farm fuel storage facility, two major complexes to house its troops and a small network of roads, streets and utility systems.



Alaska Railroad track system and current Whittier waterfront east of the Small Boat Harbor.

Since the Army pulled out of Whittier in the early 1960's, the only new developments have been a once-expanded Small Boat Harbor, expanded docking facilities at the "City Dock" and the adjacent **AMHS** ferry dock renovation of a few privately owned commercial buildings. Most land use in Whittier outside of the Small Boat Harbor has been predicated on alternate use of facilities constructed by the Army decades ago, opposed to the construction of new facilities.

A large amount of Whittier's presently developed land is used for industrial purposes. However, unlike most communities where the acreage for residential development is the largest type of land use, in Whittier the amount of land used for residential purposes is very small. A moderate amount of the developed land is used for commercial and public purposes, but the dominant existing land use is open space.

Major present industrial uses include the following: the tank farm at the Head of the Bay, the Alaska Railroad's industrial and passenger rail operations, largely in the Whittier core area, and the roll-on, roll-off barge dock next to the Small Boat Harbor. In addition, one seafood firm operates in the downtown core area.

The core area is the most crucial to any future development. Yet, the approximate land area associated with this area measures just 211.6 acres. This area includes the public rights-of-way and the portion of Whittier Creek flowing through the city, but does not include parts of Passage Canal which are owned by the Alaska Railroad (ARRC).

Of the 211.6 acres that comprise the Core Area, only 137.2 acres (64.8%) are suitable for conventional development. The other 74.4 acres (35.2%) are steep and could be developed only at premium costs normally associated with difficult terrain.

The 74.4 acres include 66.6 acres of the vacant land within the city's core. Statistically, this represents nearly 70 per cent of the uncommitted 96.7 acres theoretically available for future development.

This leaves the Core Area with approximately 30 acres of uncommitted land that is suitable for non-residential development.

Measurements indicate the following distribution of land ownership:

Ownership	Acres	% of Total
Private	59.1	27.9
Railroad	92.1	43.5
Railroad owned leased to state, city or private	16.6	7.8
City	14.2	6.7
City owned leased land	5.4	2.6
School district	1.8	0.8
Major public rights-of-way	22.4	10.7
Total:	211.6	100.0

The figures indicate that the two categories of ARRC owned land represent more than half (51.3%) of the total land area, and as much as 57.2% of the land served by major public rights-of-way, within the city core.

The present use of the land area available in the Core Area of Whittier also represents an important factor in contemplating alternative scenarios for the community's future.

Land Use	Existing Acres	% of Total
Industrial	53.8	25.4
Multi-Family Residential	5.1	2.4
Single Family Residential	4.4	2.1
Planned Unit Development	0.0	0.0
Commercial	4.7	2.2
Public Facility	6.9	22.2
Boat Harbor	0.0	0.0
Open Space	0.0	0.0
Vacant + Right-of-Way	96.7	45.7
Public Right-of-Way	0.0	0.0
Total:	211.6	100.0

In total, less than 15 acres of land are used to house Whittier's population. All year-round residents live in either the Whittier Manor, Anchor Annex or the Begich Towers condominium complexes. Although the City sold and subdivided much of the land on the east side of the core area during its first years of incorporation, only four seasonal use dwellings have been constructed. Many of these lots are steep and rocky and therefore construction of any structure is difficult and expensive. However, on these parcels the lots near First Salmon run do not appear to pose great problems and, as a whole, the area is no more difficult to develop than many areas in coastal Prince William Sound.

The major public facility that uses a substantial land area is the small boat harbor. The harbor and its adjacent parking areas, boat and trailer storage areas and support facilities, comprise much of the present waterfront development. Additional major public facilities include the school complex (about 5 acres), fire station, city offices (in Begich Towers) and the public works maintenance building. All public facilities are located in the Whittier core area and many are in former military structures.

Whittier's commercial businesses are located in the Whittier core area and the harbor triangle. There is no Central Business District and commercial uses require a very small amount of the total land base.

The largest existing land use within the City Limits is open space. In the past, there have been few development pressures on Whittier. Lands that were developed by the U.S. Army in the Whittier core and Head of the bay essentially comprise the developed land base. In addition to these areas of flat terrain, a large amount of Whittier's lands are unsuitable for development. Many of such lands have steep slopes, heavy water run-off, and minimal amounts of top soil. Some are even glaciated. These features will keep much of the land in the City Limits in an undeveloped status for decades to come.

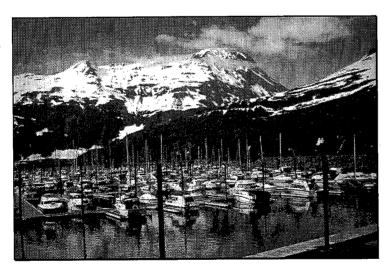
C. FUTURE LAND USE

In the past, all development in Whittier could easily be accommodated by the relatively small amount of lands in the Whittier core area and at the Head of the Bay. This land base, however, is inadequate to meet the variety and extent of projected land uses if new access were to occur. Whittier wants to concentrate future tourism/recreation and commercial development in these areas, but also wants to encourage residential and commercial growth to the east of this area incorporating the Emerald Bay and Shotgun Cove areas. Most of these lands are presently undeveloped and in their natural state.

The most likely future scenario for Whittier is as a marine, tourism/recreation center that serves as the gateway to Prince William Sound for Southcentral Alaska. In addition, the community will continue to serve as a significant industrial port, particularly because of its rail-barge and fuel transfer and storage operations. The fishing industry has been important to local business in town during the season. Whittier would like to support expansion in its commercial fishing operations, but this growth will have its primary land use effects upon the already crowded Small Boat Harbor.

Future Land Use in the Whittier Core Area

This area presently serves as the center for all residential and commercial development and major waterfront facilities, the Small Boat Harbor and industrial port. The area supports a wide variety of mixed uses and much of the developable land base is being used. For the future, Whittier envisions this area continuing to support a wide variety of uses, but concentrating more heavily on tourism and recreation in support of improved road access.



Whittier Small Boat Harbor

Whittier is a water-oriented community. In evaluating how the City might address the anticipated influx of people, the ownership, uses and character of the waterfront will have to be considered.

The waterfront associated with the Core Area measures approximately 11,300 feet. Its ownership is divided among the following four land owners:

City control through lease from ARRC City property Alaska Railroad Corporation (ARRC) Privately held Total:

5,200 feet (46%) 1,650 feet (15%) 2,800 feet (24%) 1,650 feet (15%) 11,300 feet (100%) It is important to note that while the City controls 46% of the waterfront through its lease associated with the Small Boat Harbor, essentially the ARRC owns 70% of the waterfront.

In terms of its functions, the waterfront is committed to a number of maritime/boating uses as listed below:

	Waterfront		Service Area	
Use/Function	In Feet	(%)	In Acres	(%)
Small Boat Harbor				
and Boat Storage	4,800	42.5	10	21
City Dock	400	3.5	1	2
Ferry Service	600	5.	5	10
Cruise Ship Dock	1,100	10	7	15
Freight Barge Service	1,200	11	18	38
DeLong Fuel Dock	600	5	0	0
Residential	1,200	11	4	8
Public Park	1,400	12	3	6
Total:	11,300 feet	 	48 Acres	

These figures indicate that:

- * A major portion (46%) of the Core Area water frontage is committed to recreational and commercial boating functions;
- * A significant land area serves an operation that can accommodate but a single freight barge at a time;
- * The portion of the waterfront not devoted to boating or other maritime activities represents less than a quarter of the water frontage (23%) and a mere 14% of the waterfront land. (The latter part of the waterfront is also the least accessible to residents, due to its remote location and its hilly terrain.)

Waterfront lands in the area will continue to support existing uses: the industrial port, small boat harbor and ferry dock and staging areas for these facilities. Virtually all waterfront lands and near-shore waters in this area are presently in use. Projected future uses have been identified on a recent report for the City by International Tourism and Resort Advisors (INTRA) and include proposed inward expansion of the small boat harbor to serve more and larger vessels (particularly commercial fishing boats and day tour operators) and more commercial/business development adjacent to the small boat harbor and at the remodeled and improved Marginal Wharf building. In addition, the ferry terminal dock and industrial port facilities may be moved and renovated.

Although the number of commercial businesses in Whittier are few, all are presently located in the Whittier Core Area. The City would like to see this area continue to serve as Whittier's commercial business center.

The Whittier Core Area also serves as the center for all public services and facilities. The City offices and police, fire, school and public works facilities are located here. Although limited sites for new government facilities will be reserved in the Shotgun Cove or Whittier subdivisions, the Whittier Core Area will continue to serve as the center for City services.

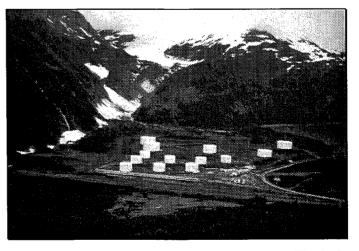
At present, virtually all residents live in one of two multi-family complexes (condominiums) in the Whittier Core Area, the Whittier Manor or the Begich Towers. The City envisions these buildings continuing to be used for this purpose, but if now-vacant railroad lands become available, the City can encourage additional multi-family development in the core area.

Whittier's few seasonal single-family residences are located along the Shotgun Cove road. Single-family residential development will continue to be allowed in the Whittier Core Area, but it will be segregated from commercial and industrial development, on the hillside adjacent to Begich Towers and the lands along the Shotgun Cove road. All of these lands have been platted and subdivided and most have been sold to private individuals.

Overall, future land use in the Whittier Core Area will continue to be mixed. The City, however, will try to guide expansion of the area as the commercial business center and minimize use conflicts through this comprehensive plan and its implementation chapter.

Future Land Use at the Head of the Bay

With exception of the fuel tank storage facilities, a short airstrip and the City's former landfill area, most of the lands in this area are presently undeveloped. Although there is a rather large amount of waterfront and flat lands on the delta, many cannot support a variety of uses because of natural impediments. For example, the waterfront lands can be used to land barges, but the shallow nearshore waters and strong winds limit their utility as an industrial harbor site for deep draft vessels.



DOD Tank Farm and Whittier Tunnel Portal at Head of Bay.

In addition, local people consider the area a poor site for year-round residential

development because of strong winds coming through Portage Pass and off Learnard Glacier.

The preferred future use for most lands in the Head of the Bay is industrial and commercial harbor expansion. Examples of the industrial uses recently suggested to the City by the engineering firm of Peratrovich, Nottingham and Drage are: continuation of the fuel storage tank farm, new offloading facility for fuel barges, an industrial dock and storage yards for freight passing through an industrial port at the site, and a combination of recreational boating facilities.

The City has entered into a lease with the U.S. Fish & Wildlife Service to use a 37 acre tract. The City is responsible for developing the area and may build a shooting range on this tract.

The City is anxious to see lands in the Head of the Bay developed for these purposes. Unlike most lands in Whittier, this delta is well-suited for industrial use. The area is easily accessible by existing roads and railroad lines, relatively flat and developable and presently being used for industrial purposes, so additional industrial use will pose few conflicts. With exception of the port and seafood processing facilities, which are located in the Whittier Core Area, the City will concentrate future industrial development in the Head of the Bay.

Future Land Use in Emerald Cove and Shotgun Cove

At present, most lands in the area east of the Whittier Core are undeveloped and in their natural state. Until recently, the lands were part of the Chugach National Forest and managed by the U.S. Forest Service.

The transfer of most lands in this area to the State, the City and Chugach Alaska Corporation means that these lands are one step closer to development. Whittier wants to encourage appropriate development for the Emerald Cove area that includes single-family residential, multi-family residential, limited public purposes (school, utilities, and parks) and open space. The City will prohibit industrial development. It is expected these lots will be developed with single family homes with independent utilities.

The City has unsuccessfully sought a developer to improve and sell its portions of these lands. A condition of the transfer from the state requires the sale of these lands by the year 2004. The rate and extent of development in this area greatly depends on construction of an access road. In addition, physical impediments (steep slopes, poor soils, avalanche areas) limit the lands that can be developed. The City must proceed carefully in making land use decisions for this area, because it is a significant future land base.

Shotgun Cove

The City's intent for the Shotgun Cove area is to encourage development that will support a quality living environment for year-round residents, seasonal residents and tourism/recreational users. As indicated by the 1993 INTRA report for AEDC, construction of the proposed Shotgun Cove Road and Harbor is the centerpiece for developing the area. Uses that will be permitted include: commercial (hotels, lodges, restaurants, stores), public purposes (boat harbor, parking, camping facilities), single and multi-family residential and open space for lands that are unsuitable for development.

The City will work closely with the Chugach Alaska Corporation (CAC) and State of Alaska to encourage development of the Shotgun Cove area. The CAC is interested in establishing commercial developments, and the State may dispose of additional lands. The City encourages high to medium density developments (commercial development and condominiums to 1 acre lots) on lands located close to the Cove's waterfront to receive an adequate return on their capital investments. However, the State lands are in the higher elevations located away from the shores of the Cove, and could allow low density development (1-5 acre lots).

D. LAND USE REGULATION

Under Alaska Statutes, Title 29, the City has the option to adopt planning, platting and land use regulation powers. To carry out these powers, the City established a five member Planning Commission appointed by the City Council, and adopted zoning and subdivision ordinances.

Zoning Ordinance

The present zoning ordinance, adopted in October 1984, uses a multi-district zoning approach and has seven districts. These districts are: single family residential, multi-family residential, commercial, industrial, small boat harbor, open space and planned unit development.

The ordinance is based on a system of permitted and conditional uses for each of the seven districts. Building dimensional requirement, such as minimum lot area, setbacks, building heights and number of parking spaces, are also identified as standards applying to each district. In addition, the ordinance identifies how it will be administered by the City, how nonconforming uses will be treated, the process and standard for determining variances, appeals and conditional uses, and how the City can amend it.

The zoning ordinance has many advantages for the community's residents and developers. The zoning districts have flexibility in the types of activities allowed in each district, and there is only one page of dimensional requirements. In addition to the standards and criteria of the zoning and subdivision ordinances, the City has an approved Coastal Management Plan. Both state and local permit activities are subject to the coastal consistency process.

Platting

The City has assumed platting review responsibility for land divisions within the city limits. The ordinance requires review and approval of the planning commission and City council for all plats. The ordinance has provisions requiring road and utility easements be dedicated during the plating review.

E. OTHER LAND MANAGEMENT TOOLS

Cooperative Agreements

The City can use cooperative agreements with one or more parties to help provide effective land management. In general, an agreement describes terms two or more parties agree to meet to help better provide a mutually beneficial service.

At present, the City uses cooperative/lease agreements with the State and Federal government to manage public facilities and provide public services. Two agreements the City has entered are:

- * a Management Agreement with the Alaska Department of Transportation/Public Facilities (DOT&PF) to operate manage the small boat harbor; and
- * an agreement with the Alaska Railroad for the City to upgrade and maintain roads located on railroad property.

The City should continue using cooperative agreements as a way of accomplishing desired projects and providing public services. This is particularly important in consideration of the new demands placed upon the City and its residents by visitation caused by improved road access.

In that regard, two cooperative agreements seem essential:

First, the City should undertake a cooperative agreement with the Alaska Railroad to obtain a commitment from the ARRC to move its rail operations out of the central part of the core area to a more concentrated location near the existing roll-on-roll-off facility. The agreement should also resolve current tideland ownership disputes and give assurance to a cooperative development scheme in the core area consistent with the Implementation Chapter of this plan and the recent INTRA report to the City on the redevelopment of the town core area.

Next, the City should also explore entering a cooperative agreement with Chugach Alaska Corporation to do initial planning and future management and development of lands to the east of the Whittier Core Area. The agreement should focus on lands in Shotgun Cove, and development concerns such as the provision of sewer and water services to common

lands and a recognition of Chugach's interest to locate commercial business enterprises in Whittier.

Municipal Land Disposal Program

As a landowner, one land management tool available to the City is the use, lease and sale of its own lands. When the City was first formed, it purchased lands in the Whittier Core Area from the General Service Administration. The City retained ownership of some of the parcels it purchased, but it disposed of most. To raise monies for the newly incorporated City, it had a land sale, but this restricted its ability to better influence how development would occur. For example, most of the lands sold were never developed, and at present, the City owns very little land in the core area to meet future needs.

Since the initial land sale, the City has periodically had sales to dispose of small amounts of property it considered to be excess. The City has not prepared a long-term land sales program but it has examined the need for the lands to be sold. The City's receipt of 600 acres in the Emerald Bay and Shotgun Cove areas emphasizes the need for it to prepare a comprehensive land development and disposal program. Terms of the conveyance require the City to dispose of all lands not needed for public purposes by 2004. This program should identify lands needed for present and future public needs (schools, roads, watersheds, etc.), and the best means for development and disposal of lands.

Land Leases

An alternative to the sale of municipal lands is to lease them for purposes that meet public needs. The City may determine that an undeveloped parcel of municipal land may be used for a development activity for a period of years before it is needed for other purposes. Leasing, rather than disposing of lands, the City can generate revenue while retaining ownership through a lease.

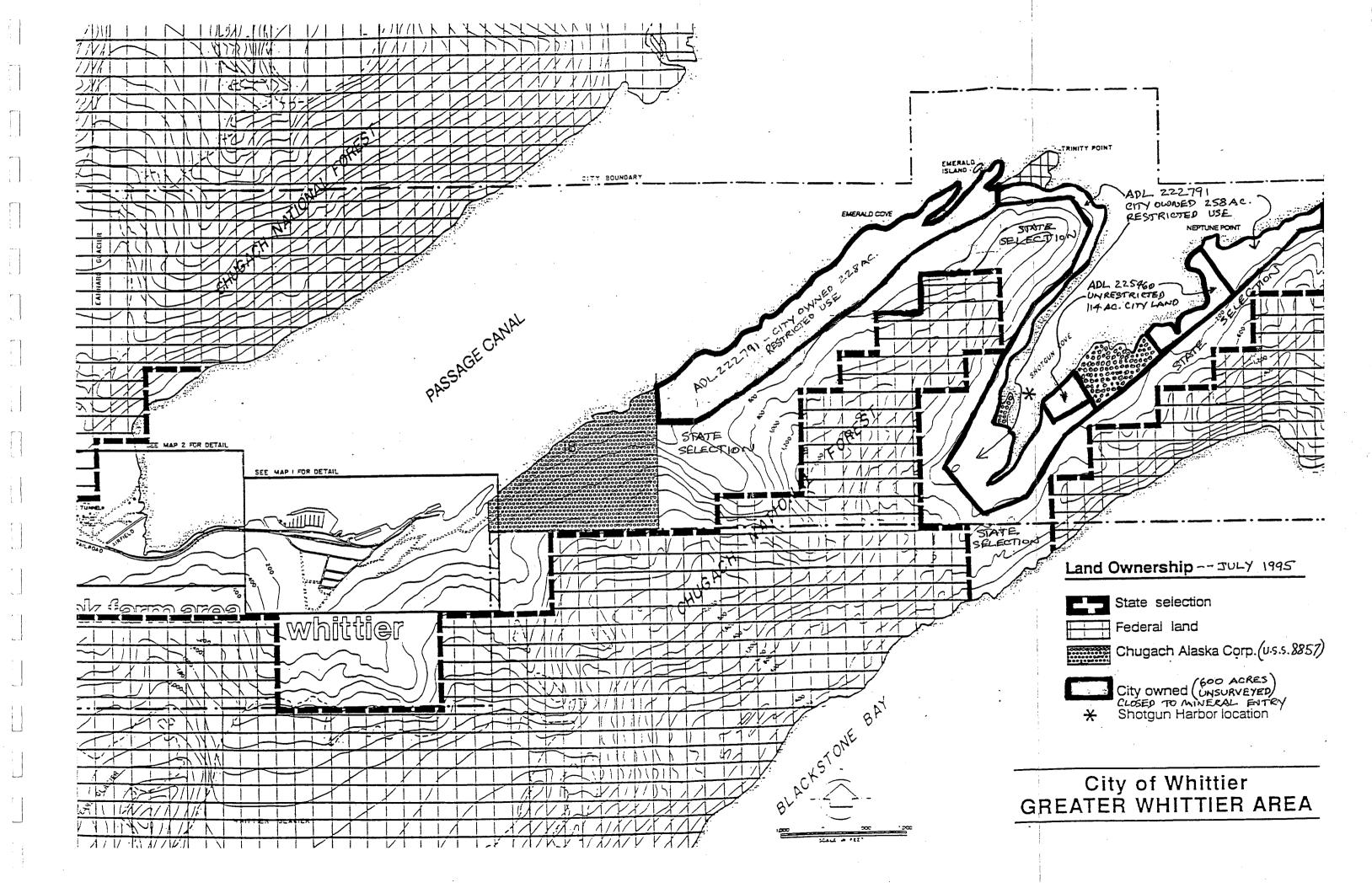
The City has few opportunities to effectively use a lease program. However, the City owns some small parcels in Whittier Core area that could be leased to a developer.

The City may also obtain advantage by leasing lands from other private and public parties. For example, the City is leasing lands from the U.S. Forest Service to serve as its police, fire department and public meeting facility. This lease costs the City little and reduces the need for the City to build its own facilities or use its limited land base for development that already exist.

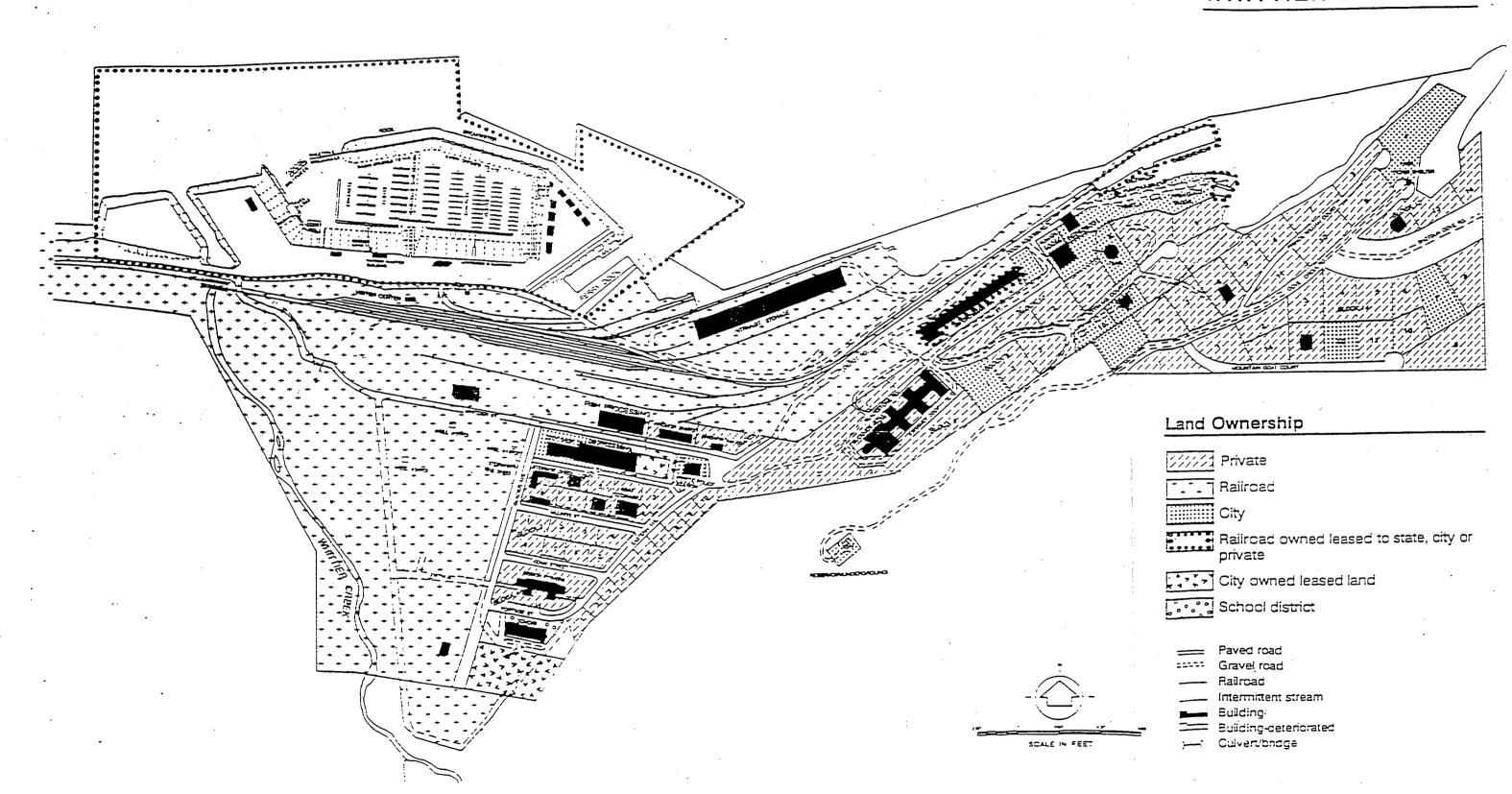
Covenants

Covenants are a common method municipalities use to maintain a degree of control of land uses after disposing of municipal lands through a land sale. Covenants are requirements, restrictions or limitations the City would place on lands by including them in the terms of the deed of sale. Covenants can be used with Whittier's present form of multi-district zoning, but the City should use them cautiously, as they are conditions on the deed and difficult to change or remove.

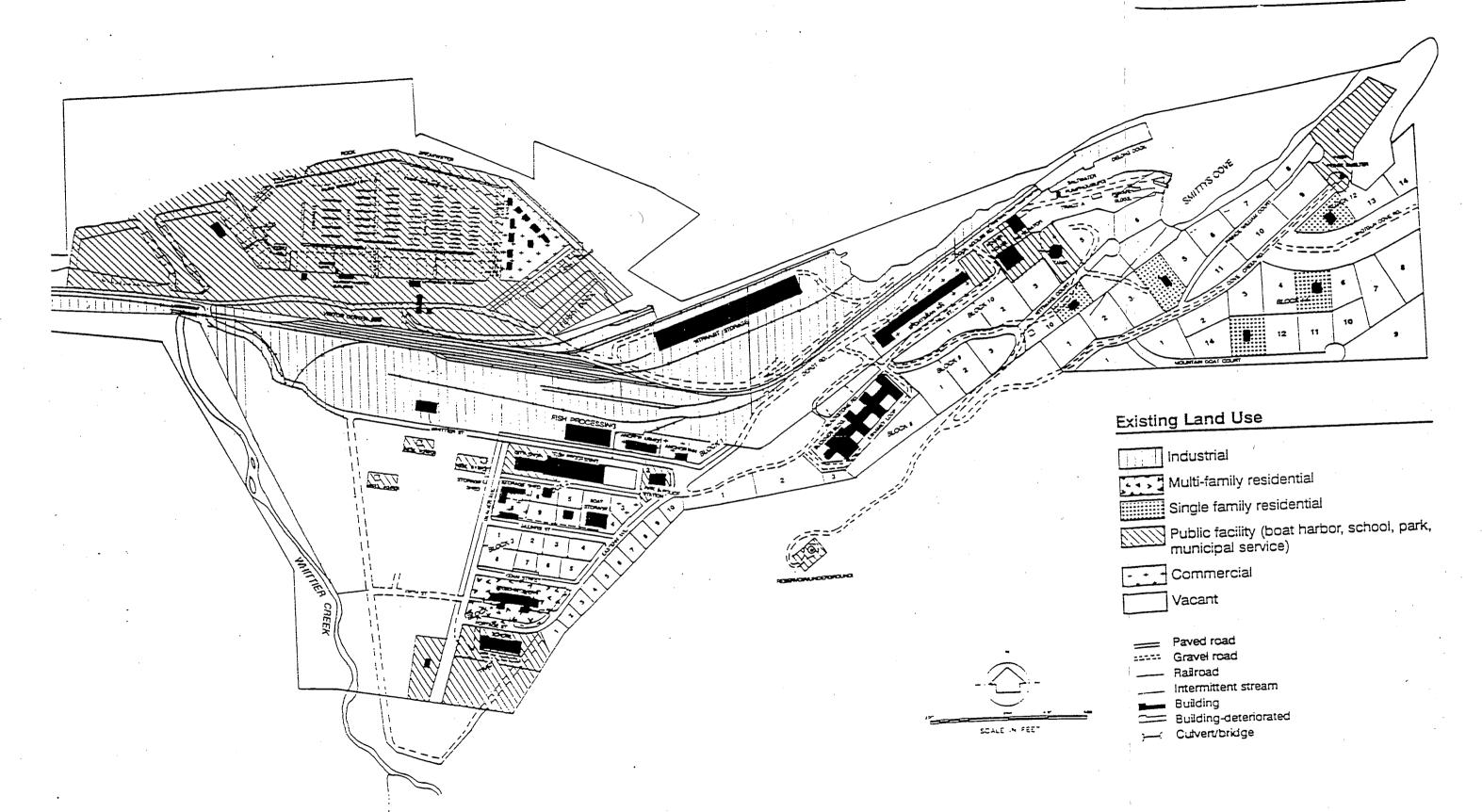
As an example, when the City disposes of its lands, it may want to attach covenants to the sale that limit the buyer from subdividing the land or require the buyer to build a house within a specified period of time. This would help prevent the holding of land for speculation without development or improvement. The hold of unimproved property which is in the core area and served by all utilities has contributed to the lack of single family housing in the community.

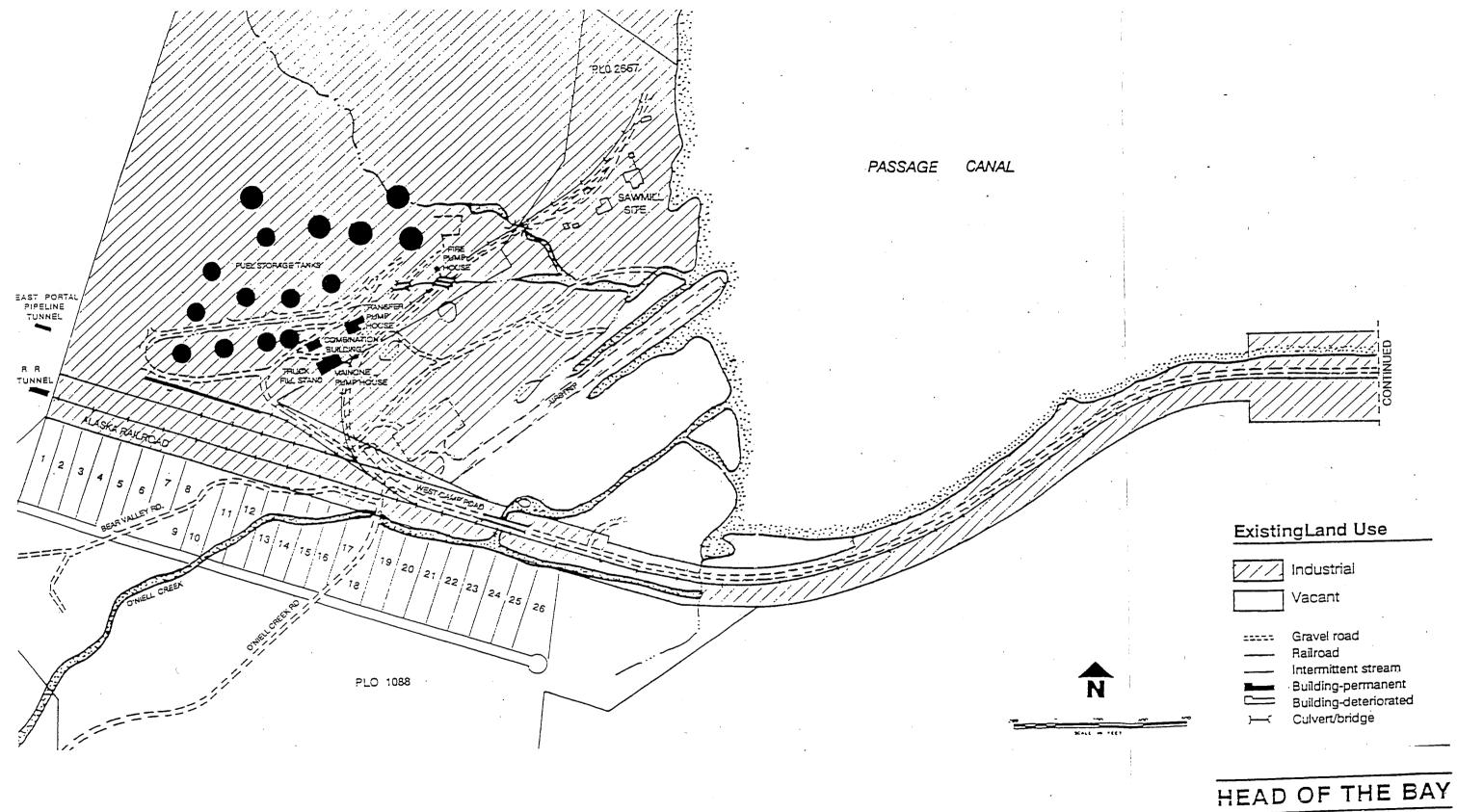


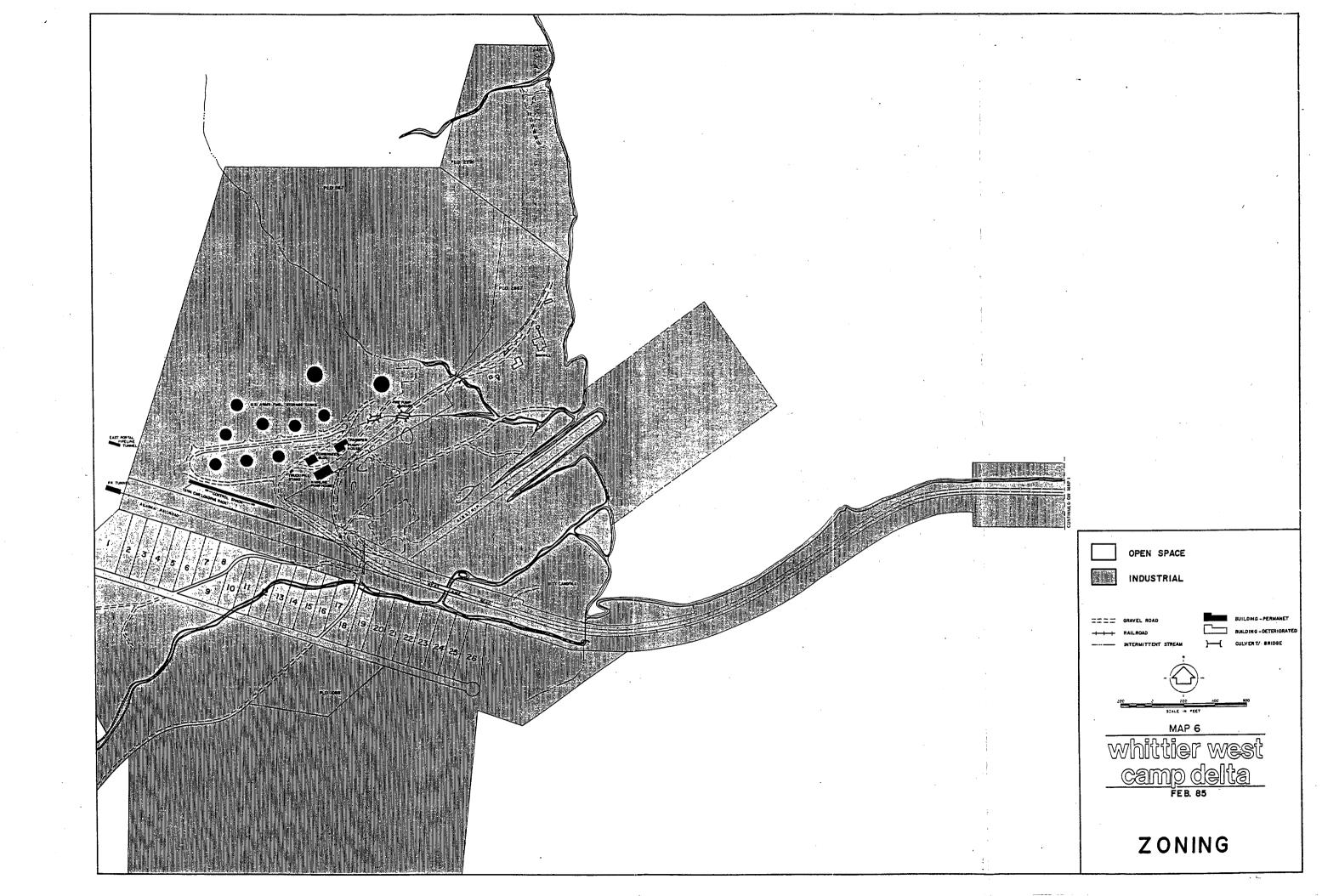
WHITTIER CORE AREA

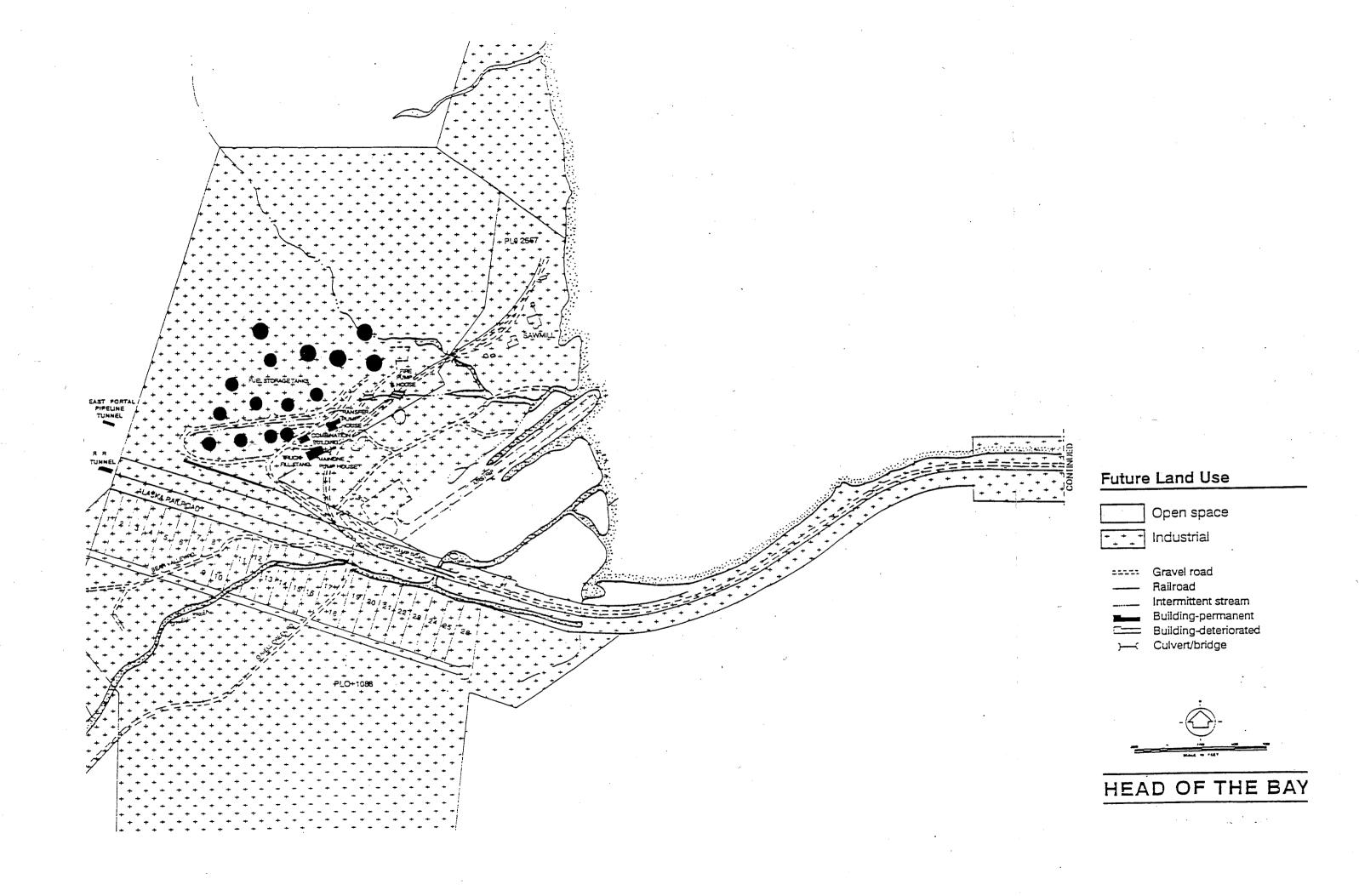


WHITTIER CORE AREA









Chapter VIII Other Plans and Recommendations

Whittier, as a second class city with statutory powers, can guide how future development occurs in the community. It can use powers, such as the land use, platting and capital improvement projects to achieve and support the Goals and Policies of this and other plans. In this Chapter, other plans are identified. There are additional efforts the City can undertake, other forms of government it may benefit from, specific statutory powers it can use and ways it can increase its abilities.

A. CAPITAL IMPROVEMENTS PROGRAM

Capital Improvements Program (CIP) planning is the principle process through which public facilities recommendations of a comprehensive plan are implemented. A CIP is a method of identifying and planning for capital improvement projects that are desired by a City.

A CIP is normally prepared for a period of five-six years. It includes projects that are needed right away and in the future, and it should be updated annually. A completed CIP should have the following components:

- * identifies desired capital improvement projects;
- * establishes priorities for funding and constructing these projects;
- * has general information on the nature of and need for the project;
- identifies a timetable/schedule for beginning and completing construction of the project; and
- * describes the most realistic and potential sources of funding for the project.

A CIP can serve as a major tool for City administrators and governing bodies to decide where limited local revenues and requested funds (mostly from the State and Federal governments) should be directed to construct needed capital projects. It is particularly beneficial in requesting funds from the State and Federal government and other sources (private industry, private foundations) as it demonstrates the need for, benefit of, local interest in and cost of constructing the requested project. In short, a CIP illustrates the city has used a planning process to determine the priorities of requested projects.

As an initial effort in the development of a comprehensive CIP the City commissioned a 1994 study known as The City of Whittier Redevelopment and Urban Design Plan, which detailed the elements of a CIP for Whittier in three phases. The first is an Initial Redevelopment Phase which calls for the expansion and relocation of the State Ferry Terminal, expansion of the City Dock and construction of an associated Day-cruise harbor, construction of new boat launch ramps and a boat storage building, expansion of the Whittier Small Boat Harbor and conversion of the Marginal Wharf Building into a Multimodal Transportation Center. The study also identified the need for a high capacity access road designed to function as the life-line for the Core Area waterfront and

associated recreational campground and parking facilities. A secondary waste water treatment facility and upgrades to the waste water piping system is a key element in the Initial Redevelopment Phase.

The Second Redevelopment Phase involves improvements to the harbor perimeter to provide amenities for the commercial fishing industry. A fisherman's dock, hoist, boat grid, and boat haul-out structure were recommended.

The Third Redevelopment Phase calls for a Municipal Services building or "City Hall" and an expanded waste water treatment plan to meet legal requirements.

The information in the sections on Housing, Community Facilities and Services and Transportation, provide background data needed to do the initial inventory of existing facilities, the first step in preparing a CIP. In addition the section on Community Goals and Policies and the Community Questionnaire in the Appendix, identified needs, facilities and services desired by residents. The Whittier Redevelopment and Urban Design Plan provides important information about the need for public infrastructure to meet demands for public services due to an anticipated increase in tourism and recreation activity in Whittier.

The study recommends that the City Council use the information in this Plan to prepare and complete a five to six year CIP. The project's identified for the first year of this CIP should be submitted to the State and other appropriate entities for funding consideration.

B. MASTER/LAND USE PLAN FOR SMALL BOAT HARBOR

In addition to this Comprehensive Plan, there are other efforts the City takes to assist in managing the use and development of the Small Boat harbor.

The City and the State Department of Transportation and Public Facilities (DOT&PF) completed a land use plan for the Small Boat Harbor in December 1985. The plan establishes guidelines for the near and intermediate term development of the harbor apron area, and can be used to provide a rational basis for leasing lands in this area. In particular, the plan gave the City a greater say in daily management of the harbor and resolved the issues of private businesses operating the harbor area, traffic flow and parking in the harbor area and the provision of City services to the harbor. The plan's recommendations were incorporated into a new harbor management agreement between the City and DOT&PF. Many of the recommendations and objectives of this plan have been accomplished and proposals for new expanded harbor facilities are being discussed. A new harbor plan is recommended that will address the issues of expansion to new areas and update the plan for the existing site.

Prior to construction of a new harbor, the City should examine the feasibility of renovating the existing Small Boat Harbor to serve alternate and expanded uses. The present harbor is designed for small recreational boats, not commercial fishing and industrial vessels (the largest berth is 48 feet in length). There has been an increased demand for larger moorage berths, but the extensive recreational use of the existing harbor and severe limitations (high cost, depth of water) on expanding it has not allowed the City to respond to this demand. The existing harbor facilities (piers) can be renovated to serve commercial fishing and larger recreational vessels, thus enhancing Whittier's ability to serve as a multiple-use marine center. The City has recently requested funding to examine options to renovate/redesign the existing harbor, as well as expand the size of the harbor.

C. TRANSPORTATION PLAN

Many comprehensive plans include a transportation plan as a discrete element. In the past, DOT&PF has assisted the City in preparing design specifications for the Shotgun Cove road and the City's Local Service Trails and Roads Program grant. These individual plans are not identified as Whittier's transportation plan, but they are the major components of one. A thorough transportation plan must be ready for implementation when funding for the Whittier access project is secured. A plan will be needed to address how to accommodate the number of vehicles that will be descending on the limited road system and parking areas. The areas near the existing harbor and along the road system are owned or managed by the Alaska Railroad. Some of these areas will be needed to accommodate the increased influx of visitors improved access will generate. A plan must be ready to implement to address the problems of an increase in temporary visitors and especially the increased number of automobiles.

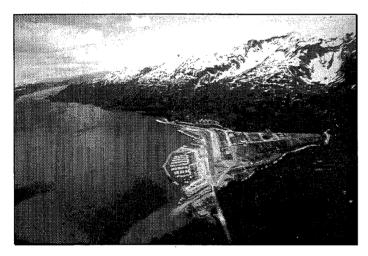
D. COASTAL MANAGEMENT PROGRAM

The City of Whittier was designated as a coastal district in 1986, when it received state and federal approval for its Coastal Management Plan. This plan contains policies and standards that will be applied to development which falls under the state permit review system. Some local actions may also have these policies and standards applied during the local approval process. The Coastal Plan contains much detailed and valuable information which can be used to supplement this plan. The Coastal Plan has the capability to address special areas called Areas which Merit Special Attention (AMSA's). The Shotgun Cove and Emerald Bay subdivision areas have been identified as AMSA's in the Whittier Coastal Management Plan. The CMP will help identify the issues, permits needed and review coastal policies which apply to the development of new facilities.

All land and waters within the city limits are included in the Whittier Coastal Management Plan. Only a few areas within the city are suitable for development and these sites are located within a short distance of the shoreline. The coastal management plan has identified several goals to provide for future industrial, commercial, and residential development, as well as improving access to Portage. The plan encourages continued support of tunnel improvements or other alternatives to allow direct vehicle access to Whittier. The plan also identifies potential conflicts between the existing rail operation and vehicle traffic and circulation in the city core.

The goals and objectives form the foundation of the plan and are intended to reflect the long-term conditions that the residents of Whittier wish to achieve. An important goal contained in the Whittier CMP specifies improving access to Portage, either through improved rail access or a direct vehicle route. Alternative #1, the no-action alternative, has no impact on achieving this goal. Alternatives #2, #3, and #4 each have a major impact toward improving access from Whittier to Portage and are consistent with the intent of the plan.

In addition, the plan identifies policies regarding the use of the shoreline that may need to be addressed by the City in the event improved access is provided from Portage. Water-dependent and water-related uses and activities have priority over land-based uses in Whittier. The plan also emphasizes recreational use of Whittier. For transportation projects, it stipulates that alignments should be located away from shorelines, and it includes safeguards of fish and wildlife habitat.



Aerial view of Whittier Town Core and Passage Canal

In 1991, an Area Meriting Special Attention (AMSA) plan for the Whittier Small Boat Harbor was produced in draft for public comment by the City of Whittier. An AMSA is an area designated during coastal management development program for detailed planning. The Whittier Small Boat Harbor was authorized as an AMSA planning area because it is considered a substantial recreational, commercial, and industrial resource of regional importance. The improvement of harbor facilities is dependent upon the use of and

access to coastal waters and new developments, and uses must be those that are directly related or dependent upon water access. The plan recommends several changes to the Whittier waterfront. These included development of a dock specifically for day-tour boats, expansion of the Small Boat Harbor or development of a second harbor at the Head of the Bay, and development of upland parking for visitors. The AMSA to date has not been finalized, as it was not adopted by the Council at the time, and today there is no effort to consider the proposal for adoption.

E. GOVERNMENT OPTIONS

The potential of rapid growth in Whittier means that the City should be prepared to meet the challenges rapid growth will bring. In order to be in the best possible position to represent its citizens and address growth, the City should consider the options offered in other government forms.

Borough Government

Forming a borough government with neighboring communities in Rural Education Administration Area #21 has been studied several times, most recently in 1988. The establishment of a Borough government in Prince William Sound was found to be economically viable but it also presented problems. The problems included: interaction among existing city governments, conflicts with taxation of Regional and Village Native Corporation lands, and the need for the Borough to provide services that are presently provided by the State (e.g. schools for Whittier, Tatitlek and Chenega). To organize a borough, the communities would need to make decisions on the class of borough to form (home rule, first or second), how representation would occur and the relationship between the newly formed borough and existing governments. The decision on the class of borough formed would reflect the amount of powers the affected communities want to place in the hands of a regional government. A proposal was made by the state Local Boundary Commission in mid-1990 to form a Borough which would include the cities of Yakutat, Cordova, Valdez and Whittier.

Whittier reviewed and discussed formation of a borough with Valdez, Cordova and the communities have decided that Borough formation was not in their best interests. Whittier's interests may or may not be served by a Prince William Sound borough, but as the nearest gateway to the Sound from Anchorage, it may be increasingly difficult for it to remain an independent second class city in the unorganized borough.

First Class City Status

Whittier is incorporated as a second class city under Alaska Statutes (AS), Title 29, Municipal Government. At present, Whittier does not meet State requirements for reclassification as a first class city; a population of at least 400 permanent residents is needed. However, if the road access to Portage is constructed, it may soon meet this requirement. The City would follow the procedures outlined in AS29.04.040 to reclassify as a first class city. The City could also receive \$75,000 in State funds over a two-year period to assist in the reclassification.

There are several major differences between first and second class cities. These differences and how they may affect Whittier are:

- a) Planning and land use regulation powers are mandatory for first class cities and optional for second class cities. Whittier has elected to assume these powers, so reclassification as a first class city would not affect this power.
- b) First class cities are required to exercise educational powers and second class cities are unable to exercise this power. The Chugach School District presently provides educational services for Whittier. If it reclassifies as a first class city, Whittier would have to assume this power and provide financial support for operation of local schools. The City may experience problems in financing school

facilities and operations, but the City would have direct control of school operations.

c) Second class city authority to levy a property tax is limited to a maximum of 20 mills, and this power must be granted by a referendum of the voters. First class cities may tax property to a maximum of 30 mills, with the City Council responsible for establishing the mill rate. The ability to increase property tax rates has obvious advantages to a City government, particularly because of the potential need to provide new and expanded services. However, the local government's ability to increase taxes may not be welcomed by local residents. In addition, it may be difficult for the increased rate of taxation and taxes collected to offset the increased costs the City would incur to operate the Whittier school system.

Informal Association with Other Communities

Whittier needs to keep abreast of what is occurring in Southcentral Alaska. The City will participate and, when necessary, promote meetings with neighboring communities to discuss common issues, goals, and needs.

Relationship with Prince William Sound ARDOR

The Alaska Regional Development Organization (ARDOR) program provides the City with access to matching grants from the Alaska Department of Commerce, Division of Economic Development. In addition, the ARDOR provides grant seeking and grant administrating services. Because the City does not have staff to seek and administer grants it should utilize the ARDOR to assist with CIP funding efforts.

F. PRINCE WILLIAM SOUND AREA PLAN

The Prince William Sound Area Plan for State Lands, issued by the ADNR and Alaska Department of Fish and Game in 1988, outlines specific plans for state lands in Prince William Sound. Included are state lands in and around the City of Whittier and in western Prince William Sound. In general, this plan anticipates increasing development within the City of Whittier and supports recreation and settlement in the Whittier area and the preservation of the wilderness recreation qualities in and beyond Passage Canal.

G. ALASKA MARINE HIGHWAY PLAN

The Alaska Marine Highway System is currently studying use patterns in Prince William Sound to evaluate the M/V Bartlett (ferry). The ship is aging and in need of significant maintenance or replacement, depending upon the types of demand expected in the future. Marine Highway officials state that the results of the current proposal to improve access to the Port of Whittier will influence their decision.

Chapter IX Community Goals and Policies

This section of the plan sets forth guidelines which the City and those controlling land or planning development in Whittier can use to help make day-to-day and long range decisions. The goal and policy statements provide direction on general and specific forms of development and community issues which the City must face. The Goals and Policies were formulated by a variety of means. The main methods used include: review of existing information on Whittier (including the contents of Chapters I to VIII of the Comprehensive Plan), meetings with the City Planning Commission and Council, discussions with City government personnel and conversations with residents.

The goal statements identify a broad interest for development or an issue vital to the community. The policy statements are more specific. They describe an action the City will take.

A. COMMUNITY GROWTH

Whittier as a federal enclave has experienced periods of rapid population growth and decline. The possibility of improved access from Portage and the Seward Highway, construction of the Shotgun Cove road and boat harbor and the expansion of commercial boat space at the Small Boat Harbor demonstrate the potential for significant population growth. However, there are impediments to population growth such as lack of single family housing and direct road access.

Long term viability of the City is a major concern. The City is working to expand its role as a major marine center, both for recreational/tourism and commercial users. Most residents would like to see Whittier grow, but they prefer the community develop as more of a place to live rather than a temporary station where people are housed. The residents of Whittier want to ensure all growth is orderly, and that they have control of future development. The City recognizes that because of the land ownership pattern and government ownership of major facilities, many of the decisions about development must be coordinated with Alaska Railroad Corporation or federal government.

The following goal statements reflect overall community growth interests. More specificity is provided in the subsequent goal and policy statements.

Goal #1: The City shall protect and enhance the natural features, environment, and scenic beauty of the area around Whittier.

Policy #1: The City will strictly enforce its coastal management plan and subdivision and zoning ordinances.

Goal #2: The City shall encourage expansion of marine and onshore recreational opportunities, the commercial fishing industry, tourism, commercial businesses, residential development and marine related industries.

Policy #1: The City will work to acquire ownership or control of lands and

facilities in the port area to accommodate existing or new activities.

Policy #2: The City will be pro-active in its economic development strategy in order

to take full advantage of local business opportunities and public benefits.

Policy #3: The City will offer residential, commercial and industrial lands with

covenants which require development for the intended use.

Goal #3: The City shall encourage the State, Federal governments, Alaska Railroad, Chugach Alaska Corporation and other large land owners to work with the City to obtain desired development.

Policy #1: The City will project a consistent, business-like attitude as a means of

attracting public and private investment in public infrastructure and

commercial development.

Policy #2: The City will seek to annex areas which are planned for sale or

development by the state such as Poe Bay, Billings Cove and Decision

Point.

Goal #4: The City shall ensure that activities that pose a threat to human safety or the environment are conducted with the utmost care and are fully coordinated with the residents of Whittier.

Policy #1: The City will encourage the training of local personnel and provision of

equipment in Whittier to control and respond to life threatening industrial

accidents.

Policy #2: The City encourages industrial users to develop a satisfactory response and

evacuation plan for the area.

Policy #3: The City will work with transporters of hazardous materials to develop an

improved awareness of existing capabilities to respond to emergency

situations.

B. ACCESS/TRANSPORTATION

At present, Whittier is accessible by the Alaska Railroad via Portage, by the State ferry system from Valdez and Cordova and by small aircraft. Each of these modes of access, however, has significant limitations. The ferry only operates seasonally and poor weather and inadequate facilities make air travel an exception. The railroad shuttle is time consuming and costly for frequent users. These access constraints have limited Whittier's growth. The primary policy goal of this section is to improve access to Whittier.

Another concern is transportation within the City. The existing road system enables transportation within the City core area, but it does not allow safe vehicle access outside of the developed Whittier Core and the Head of the Bay. Parking and accommodation of summer visitors and their vehicles is a continuing problem.

Goal #1 The City shall work to provide improved access from the State highway system into the community as its highest priority.

Policy #1: The City supports paved road access to the community.

Policy #2: The City will use its revenue bonding authority to fund infrastructure improvements in support of improved access.

Goal #2: The City shall expand and improve the existing road system within the City.

Policy #1: The City will pursue funding to continue paving, realignment and improvements to streets and roads in the core area.

Policy #2: The City will pursue the development of Alaska Railroad land to provide vehicle storage and parking areas.

Policy #3: The City encourages the State to construct an access road to Emerald Cove and Shotgun Cove.

Policy #4: The City supports the construction of access and utilities to lands suitable for residential and commercial development in the Whittier Subdivision Phase II and Emerald Cove Subdivisions.

Goal #3: The City shall encourage increased State and private ferry service to Whittier.

Policy #1: The City will work with the Alaska Marine Highway System to obtain winter ferry service between Whittier, Valdez and Cordova.

Policy #2: The City will work with the Alaska Marine Highway System to increase summer ferry activity between Whittier, Valdez, Cordova and Seward.

Policy #3: The City will work with the State and private interests to construct enlarged docking facilities for ferry vessels in the community.

Policy #4: The City will encourage the Alaska Railroad and Alaska Marine Highway System to inform their staff and passengers of recreational opportunities in Whittier.

Goal #4: The City shall continue to advocate improvement of the existing shuttle service, so long as it operates in Whittier.

Policy #1: The City will encourage the Alaska Railroad to ensure that the shuttle service is operated on time.

Policy #2: The City will continue to urge the Alaska Railroad to provide daily service during the winter.

Policy #3: The City will work with the Railroad to ensure that the single public rail crossing is not blocked for long periods of time.

Policy #4: The City supports efforts of all Railroad shuttle users to secure reduced rates.

C. PORT & HARBOR DEVELOPMENT

The Whittier Small Boat Harbor was originally built by the State in the early 1970's and expanded in 1980. The harbor is predominately used by recreational boaters, commercial fishing vessels, charter vessels and tugboats who compete for limited space. The harbor has an extensive waiting list for slips of all sizes.

Goal #1: The City supports maintenance and renovation of existing harbors, docks and wharfs and construction of new facilities.

Policy #1: The City supports development of a commercial boat harbor or enlargement of the existing harbor, for fishing Charter and day-tour vessels.

Policy #2: The City will work with State and Federal agencies and private sources to obtain funds to enlarge the current harbor and design and construct other harbors at sites in Passage Canal.

Policy #3: The City supports the sharing of existing facilities with the commercial fishing fleet.

Policy #4: The City will manage any new or improved harbor facilities for multiple uses.

Policy #5: The City will work to provide seafood unloading facilities and areas where commercial fishing vessels can be provisioned, docked and worked on without conflicts with recreation users.

Goal #2: The City shall continue to make needed improvements to the existing Small Boat Harbor.

Policy #1: The City will work with the Alaska Railroad and the state to resolve

management and ownership conflicts on lands around and in the small boat

harbor.

Policy #2: The City encourages private businesses to provide services at the harbor.

Policy #3: The City will work to maximize the use of parking space in the harbor

apron area.

Policy #4: When an additional harbor is constructed or the current harbor is enlarged,

the City will support changing the float configuration at the existing harbor to add vessel berths to enhance its role as a recreational/tourism harbor for

larger vessels to serve those uses.

Policy #5: The City will work to provide improved year around facilities to the harbor

area.

Policy #6: The City will maintain a Capital Improvements and Facilities replacement

fund as part of the Whittier Small Boat Harbor Enterprise.

D. ECONOMIC DEVELOPMENT

In the past, the community has seen growth in the development of commercial fish processing and the development of the harbor triangle area for commercial use. Now the greatest potential seems to be the recreation/tourism industry, especially if new access is provided from Portage. The capture and recirculation of money which now passes out of the community and the influx of new visitors will be the key elements in developing a viable local economy. The potential of improved access and projects such as the Shotgun Cove road and harbor may bring about considerable economic growth within the next decade.

Goal #1: The City shall maintain and encourage expanding Whittier's use as a major marine center for Southcentral Alaska.

Policy #1: The City will encourage expansion of Whittier's economy based on

commercial fishing, marine industrial and tourism/recreation activities.

Policy #2: The City will support improved access as a means of expanding Whittier's

role as a fresh and frozen fish market to Southcentral Alaska and

worldwide markets.

Policy #3: The City will provide incentives for economic development when the development will clearly provide economic benefit to the community.

Goal #2: The City shall maintain and encourage developing Whittier as a deep water port.

Policy #1: The City supports the rehabilitation of the Marginal Wharf dock for ocean cruise ships and conversion of DeLong dock for docking ocean going vessels.

Policy #2: The City supports the continuation of a fuel and product storage and transshipment depot in Whittier.

Policy #3: The City supports the conversion of the Army's POL to provide natural gas to Whittier and the development of natural gas liquification at the Head of the Bay.

Goal #3: The City shall encourage expansion of commercial business and service industry development in Whittier.

Policy #1: The City supports and encourages renovation of existing structures for commercial businesses, warehouses and fish processing in the Whittier Core area. The City will use its planning and zoning powers to accomplish these objectives.

Policy #2: The City will help attract commercial development that serves local community needs and among other tools, will use its planning and zoning powers to accomplish these objectives.

Policy #3: The City will assist in identifying and accomplishing the transfer and/or lease of land owned by the Federal and/or State government for use by commercial businesses.

Policy #4: The City supports use of Whittier's Head of the Bay area as an industrial and freight port by the Alaska Railroad Corporation. The City will support the relocation of freight roll-on,roll-off rail car service in Whittier.

Policy #5: The City will offer incentives to private enterprise to provide services which are lacking or insufficient, provided the enterprise demonstrates a documented need and a clearly defined public benefit.

E. TOURISM

Every summer, many thousands of tourists pass through Whittier. Unfortunately, Whittier is largely a transfer point, not a stop-over or destination for most visitors. Whittier's potential to serve as a major recreation/tourism center has not yet been tapped.

Goal #1: The City shall encourage increased tourism in Whittier.

Policy #1: The City will work with tour and charter operators to have Whittier recognized as an overnight stop-over for ferry, cruise ship and railroad tourist passengers.

Policy #2: The City supports the establishment of businesses that provide overnight tourist services.

Policy #3: The City will work with State and Federal agencies to expand onshore recreational opportunities such as parks, signed hiking trails and campgrounds.

Policy #4: The City will encourage and support the dissemination of information and materials about Whittier for use by visitor centers, tour agencies, the State Office of Tourism, the state ferry system and cruise ship operators.

Policy #5: The City will improve camping and picnic facilities to encourage visitors to spend more time in Whittier.

Policy #6: The City will sponsor a yearly city-wide clean up day.

Policy #7: The City will provide support for summer flower plantings and establishment of permanent plantings such as trees.

Policy #8: The City will help to foster a friendly and inviting attitude towards summer visitors.

F. HOUSING/RESIDENTIAL

All year-round and seasonal residents live in one of Whittier's two condominium complexes, the Begich Towers or the Whittier Manor. The desire for detached single family housing ranked high in the community survey.

Goal #1: The City shall encourage a diversity of safe, adequate and well-planned housing in Whittier that responds to community needs and preferences.

Policy #1: The City will identify areas suitable for low density single family and multi-family residential development and encourage their construction

using its planning and zoning powers, among other tools, to accomplish this objective.

Policy #2: The City will prepare a municipal lands disposal program to make lands available for residential development.

Policy #3: The City encourages the State Department of Natural Resources to dispose of State lands in Passage Canal that are suitable for private residential development.

Policy #4: The City will pursue funds to design and construct sewer and water utility systems to serve residential areas.

Policy #5: In areas not served by City sewer and water, the City supports the use of on-site water collection and sewage disposal system that meet Alaska Department of Environmental Conservation standards.

Policy #6: The City will require development of lands that it sells or leases in order to prevent speculation and encourage actual developments within a specific time.

G. SOCIAL SERVICES/HEALTH CARE

Since its inception the City has wrestled with the high cost of health care in Whittier. In 1994 the City found it could no longer financially support a health clinic with a mid-level care provider. Nevertheless, the community looks forward to the day when the population of Whittier is large enough to support such a facility.

Goal #1: The City shall improve the quality and availability of medical services in Whittier and enhance access to these services by residents of the community.

Policy #1: The City will provide financial support, within its means, for physician services and emergency medical services.

Policy #2: The City supports expanding and upgrading the existing Emergency Medical Technician (EMT) program. An effort will be made to qualify as many residents as possible.

Policy #3: The City supports the addition of an EMT III or Paramedic to support community health care.

Policy #4: The City encourages State and Federal agencies and private vendors to deliver direct mental health, medical, dental and social services on a regular basis.

Policy #5:

The City encourages the state to recognize the importance of Whittier as an emergency medical center for western Prince William Sound.

H. COMMUNITY FACILITIES/UTILITIES

Except for the public school complex and small boat harbor, most of Whittier's community facilities and utilities are remnants from the U.S. Army's involvement during the 1940's - 1960's. Improvements have been made, but the City's sewer, road system, housing stock, commercial buildings and railroad operations were all initially built by the Army.

An overall goal for each of the community facilities and utilities is as follows:

Goal #1: The City shall provide safe and adequate public facilities and utilities to support the existing population's needs and to provide opportunities for community growth.

Policy #1: The City will collect sufficient user fees to offset costs of providing sewer

and water service.

Policy #2: The City will work with State and Federal agencies, the Alaska Legislature

and private developers to obtain funds to repair and expand the existing

sewer system.

Policy #3: The City supports effective alternatives to central sewer and water systems

in areas of the municipality where connection to the central system is cost prohibitive or ineffective, provided such system meets Alaska Department

of Environmental Conservation standards.

Goal #2: The City shall have adequate, safe and dependable electrical power and telephone service available for the City's existing needs and for community growth.

Policy #1: The City will ensure there are necessary easements for maintaining and

expanding the existing electric power system.

Policy #2: The City will work to ensure that adequate electric power is available for

future development in Emerald Cove, Shotgun Cove, Head of the Bay and

for expanding industrial use in the Whittier Core.

Policy #3: The City will provide necessary easements for maintaining and expanding

the telephone system.

Policy #4: The City will encourage, through its permit approval powers, developers

and owners of commercial, industrial and multifamily facilities to maintain

adequate emergency generator power.

Policy #5: The City will encourage continued improvement to the telephone service

available, including Wide Area Telephone Service (WATS), cellular phone and emergency communication services for City residents and users of the

Sound.

Policy #6: The City will not assume responsibility for providing electrical service as a

municipal utility.

Goal #3: The City shall ensure quality classroom and educational facilities for Whittier's school-age population.

Policy #1: The City will provide municipal lands for public school facility needs and

will reserve a site for a public school in the Shotgun Cove Subdivision and

Emerald Cove Subdivision.

Policy #2: The City will work with the Chugach School District to secure funding and

improvements to the existing facilities.

Goal #4: The City shall provide improved public safety and community center facilities.

Policy #1: The City will pursue funds to construct a community recreation center to

improve the level of health and fitness in the community.

Policy #2: The City will establish a sinking fund to replace aging equipment and repair

facilities.

Policy #3: The City will work to acquire ownership of the Firehall and consolidate

City Administration functions therein.

I. RECREATION

Whittier's marine location on Passage Canal provides most of its recreational opportunities. Recreational motor boating, sailing, kayaking, fishing and sightseeing are enjoyed by tourists and local residents. In contrast, land-based recreational opportunities are limited.

Goal #1: The City shall maintain and expand existing recreational opportunities for residents and tourists.

Policy #1: The City will set aside areas to provide for public recreation use. Areas near Emerald Cove, Whittier Creek, First Salmon Run and Second Salmon Run will receive primary attention. Policy #2: The City will improve the existing camper park, Smitty's Cove Park and work with the U.S. Forest Service and the State to designate potential recreational sites in the Passage Canal area. Policy #3: The City will work with State and Federal agencies to assist in constructing the Shotgun Cove small boat harbor. Policy #4: The City will work to provide increased onshore recreational facilities and activities for users. The City supports the expansion of the Community Education Program to Policy #5: include weekend gym hours and expanded programs and equipment. Policy #6: The City will work with the U.S. Fish and Wildlife Service and State Division of Parks (DNR) to identify and sign hiking trails in the Whittier area. Policy #7: The City will seek to fund athletic facilities (softball, soccer, tennis courts, ice rink, etc.) The City will work with State and Federal agencies and private interests to Policy #8: develop recreational facilities. Policy #9: The City will identify municipal lands best suited for conservation, open space and recreational use and will use its planning and zoning powers to protect these lands. Policy #10: The City will identify, during the subdivision process, traditional access routes and recreational areas for preservation. Policy #11: The City will work with the state to develop camping and picnicking facilities along the proposed Shotgun Cove road and at Shotgun Cove harbor, Trinity Point and Decision Point Marine Park.

J. LOCAL GOVERNMENT

These goals concentrate on services the City provides.

- Goal #1: Services provided by the City should be responsive to community needs and preferences, and should not unnecessarily conflict with private interests.
- Goal #2: City government will effectively and efficiently provide for daily administration of the City consistent with the goals, policies and implementation strategy identified in this Comprehensive Plan.
 - Policy #1: The City will ensure that sufficient revenue is available through fees and taxation to maintain a professional staff to meet the goals of this plan and generally accepted administrative practices.
 - Policy #2: Elected representatives and administration officials will carefully monitor public debt in support of infrastructure or economic development to ensure that the City operates within its means.
- Goal #3: Elected and appointed officials and the City administration are responsible for understanding and implementing the policies identified in the Comprehensive Plan and services provided by the City and local development should be consistent with guidelines in this Comprehensive Plan.

Chapter X Plan Implementation

This chapter of the plan establishes a comprehensive plan implementation schedule for community decision makers and others interested in the development of the City of Whittier. It takes the information contained in chapters I to VIII, particularly as this information describes the extent of potential growth as a result of improved access from Portage, as well as the community goals and policies contained in Chapter IX, which identifies the community's policies in responding to such growth.

Because the response to improved access and the other potential growth opportunities established in this plan are extensive and complex, it has been determined that plan implementation shall proceed in four phases, with the first being complete (or nearly complete) before beginning with the second, and so on. However, given that current ordinances require that this plan must be reviewed every two years, changes may be made in the phasing suggested here as planning and development progresses and this plan is periodically updated.

The first phase, which is proceeding simultaneously with the writing and adoption of this plan, is consistent with the 1990 version of this comprehensive plan and the overall community desire for new road access from Portage, as well as planning and preparation of key projects within the town core to respond to the new visitation anticipated from such access. However, should improved access not occur the City's infrastructure will still have needs which will require some of the improvements described in this chapter.

Future phases two, three and four include (1) construction activities of the initial projects in the town core and (2) planning and implementation of subsequent phases of construction in the town core that are likely to result from improved access. At the same time, these later phases discuss plans for the development of industrial facilities at the Head of the Bay and at Shotgun Cove, including the use of the 600-acre land entitlement received by the City from the State legislature.

A. PHASE ONE -- SECURE NEW ACCESS AND UNDERTAKE TOWN CORE/INITIAL DEVELOPMENT PHASE PLANNING.

Secure Improved Access from Portage

The highest community priority is to secure new access from Portage. This requires careful, yet extensive advocacy within the community and outside it, particularly with decision makers in adjacent communities. Recreationalists from Anchorage and the tourism industry are particularly interested in this new access, and outreach to them shall be a high priority. The community will also maintain a high degree of advocacy with the Alaska Railroad, the Governor and interested legislators.

Three alternatives are being processed in the current EIS process to improve access from Portage. While any of the three choices is better than the current access provided to the

community, this plan urges support of the access provided by Alternative 3, provided impacts to the City's infrastructure can be mitigated with minimum adverse effects.

Community leaders will continue to participate in the development and implementation of the environmental impact statement for the Whittier Access Project to ensure that the current State administration fully supports improved access, mindful of attendent impacts on the community.

Plan for Initial Town Core Development

At the same time that the EIS undergoes final implementation of new access, the City Administration shall prepare for the initial development of the town core consistent with this Comprehensive Plan and the Plan map found at the end of this chapter. While most of the projects identified in the initial development phase are supportable without new road access, it is assumed that financing will be more likely if road access is funded and underway, given the anticipated volumes of visitors to the community under the road access scenarios. While many and various projects could be undertaken in this first phase, the City Administration shall concentrate on the key impacts further described in this chapter.

Initial steps include extensive work with the Alaska Railroad and its key executives to establish a partnership arrangement for the removal and relocation of rail tracks and development of the vacant or underutilized railroad lands within the town core. Such steps will include entering a long term cooperative agreement with ARRC governing the removal of the tracks, the use and operation of the lands, and methods by which they might be cooperatively developed.

Given the key role of waterfront development, the City and Railroad also need to work with State agencies and the Bureau of Land Management to resolve the long standing tideland dispute identified in Chapter VII, particularly in the Small Boat Harbor.

Once this plan is adopted, and the cooperative agreement with the Railroad is assured, the City will need to rezone town core lands in support of the initial development phase. This will require ordinance amendments and a public hearing process before the Planning Commission and City Council. Once accomplished, a survey and replat of the downtown core area must be accomplished to guide new development consistent with the community's goals and policies.

At the same time, during the initial development phase, the City should support plans identified in this chapter for future phases by securing the rights of ownership of the 600 acres east of the town core, including survey and formal conveyance.

In the event the road alternative is not chosen as the preferred access mode, the City will still pursue the expansion of the Whittier Small Boat Harbor and seek cooperative agreements with the Alaska Railroad regarding land use and management to ensure the future growth and development of Whittier.

Determine Feasibility of Key Town Core Projects

Once the cooperative agreement is concluded with the Alaska Railroad, and the tidelands boundary is resolved, the community can work with the Railroad and other interested parties on a cooperative basis to determine the cost and economic feasibility of key town core projects, including (1) moving the ARRC rail lines from the middle of the town core, (2) the proposed expansion of the Small Boat Harbor with design consideration for all marine vessel user groups, (3) a new community sewer system, (4) the essential road network to support initial development, (5) upland recreational areas, (6) the renovation of the Marginal Wharf and its adjacent building (the Marginal Wharf Building).

It is hoped these feasibility efforts will be concluded in 1995 to assure optimal opportunity to secure legislative support in the 1996 legislative session. However, given reduced state capital funds, the community should identify and actively seek alternate funding sources for project development and construction--including support from the Railroad and tour industry participants, federal government sources (including the U.S. Army Corps of Engineers), and local users.

B. <u>PHASE TWO</u> -- CONSTRUCTION OF ALL ELEMENTS OF THE INITIAL DEVELOPMENT PHASE OF THE TOWN CORE

Once the development and feasibility work is concluded, construction should begin. Given the anticipated requirement of extensive public and private funding for construction, this plan contemplates flexibility in the manner and means of achieving the initial redevelopment of the town core using the framework of this plan.

The City Administration will focus on projects identified in the initial development phase of the town core to achieve the following: (1) the movement of the Railroad tracks from the middle of the town core, (2) DOT/PF funding and construction of the essential road network from Whittier Creek to the center of town, (3) the Small Boat Harbor expansion, (4) Marginal Wharf and Building Reconstruction, (5) completion of a new Citywide Sewer System, (6) water and other utility hook-ups as required, and (7) recreational campground facilities, (8) relocation of the AMHS ferry operations.

Construction should be timed to assure completion at or near the time that new road access is provided through the Whittier Access Project from Portage. This will ensure maximum opportunity for the community to respond to the new demands placed upon it by new access, and its ability to hold and benefit from the visitation that occurs.

C. PHASE THREE -- CONSTRUCTION OF THE SECOND DEVELOPMENT PHASE OF THE TOWN CORE AND PLAN HEAD OF BAY AND SHOTGUN COVE PROJECTS

Private Construction in the Town Core

Once the initial development phase is constructed, and improved access is completed, it is anticipated that the second phase of development within the town core will continue. Most of this activity will come from private sources of funding to take advantage of the new economic activity in the community. This is the expected result, and it is a theory that is supported by careful analysis conducted by both the EIS consultants and this plan.

Among other things, such construction will begin expansion and redefinition of the commercial center of the community and create new residential units within Whittier. The principal governmental response will be to establish clear guidelines for development through planning ordinances and actions of the Planning Commission, as well as identify sources of funding to assure that impacts of increased visitation are realized throughout the town core, particularly in those areas away form the waterfront, which were the focus of the first phase of town development.

Movement of Industrial Activities to the Head of the Bay

As the town core is the subject of enhanced construction activity that changes the focus of its economic base, at some point the community will be required to further plan for expansion to accommodate the movement of current industrial uses from the town core. This plan contemplates that all new industrial activity will be located at the Head of the Bay.

This plan directs the City Administration to follow the concepts established in the 1994 report conducted for the City by the engineering firm of Peratrovich, Nottingham & Drage. That report described concepts for the move of all ARRC industrial activity and DOD fuel operations to new sites at the Head of the Bay, as well as companion recreation facilities to accommodate small boat traffic from recreationists utilizing improved access to Prince William Sound.

Plan, Fund and Construct Road to Shotgun Cove

While it is a laudable goal, it is the determination of this plan that the Shotgun Cove Road should not be the current focus of Whittier's redevelopment efforts. Instead the Shotgun Cove Road and development to the east of the current development limits of the City should be driven by market forces once improved access to the community is secured and the town core area is more substantially utilized.

Once the town core is fully involved in an expanded economic base, then both industrial expansion at the Head of the Bay and Shotgun Cove planning should begin in the third phase.

The first steps will include a cooperative agreement with the other principal landholder, the Chugach Alaska Corporation, and planning for the use of the 600-acre land entitlement received by the City from the State legislature. This land will require platting and disposal.

Once these steps are achieved, then a road could be planned with the assistance of the State of Alaska. The principal uses for the Cove shall center on recreation, anticipating the harbor and upland development concepts identified by INTRA in its 1993 report to the Anchorage Economic Development Corporation, referred to earlier in this plan.

D. PHASE FOUR -- CONSTRUCTION OF FINAL TOWN CORE DEVELOPMENT PHASES AND PROJECTS AT HEAD OF BAY AND AT EMERALD BAY/SHOTGUN COVE

The final phase of development contemplated by this plan suggests that there will be further private investment in the community in the town core, as well as at both the Head of the bay and along the proposed road to and within Shotgun Cove. The City will actively participate with developers to ensure the construction of the third and final development phases, including multi-family and single family residential housing and an expanded commercial center.

Outside the town core, the City will assure the sale and development of the City land along the road to Shotgun Cove, as well as the detail facility development within the harbor of Shotgun Cove and in key sites along its uplands in accordance with the 1993 INTRA Reports to AEDC described herein.

However, given that these projects are likely to begin over a decade after the completion of this plan, it is anticipated that further revisions to this plan in future years can better anticipate the steps required to achieve these long term objectives at the head of the Bay and along the road and within Shotgun Cove.

TOWN CORE UTURE LAND USE PROJECTION D EITHER HARBOR EXPANSION OR IMPROVED ACCESS OCCUR

on al Business

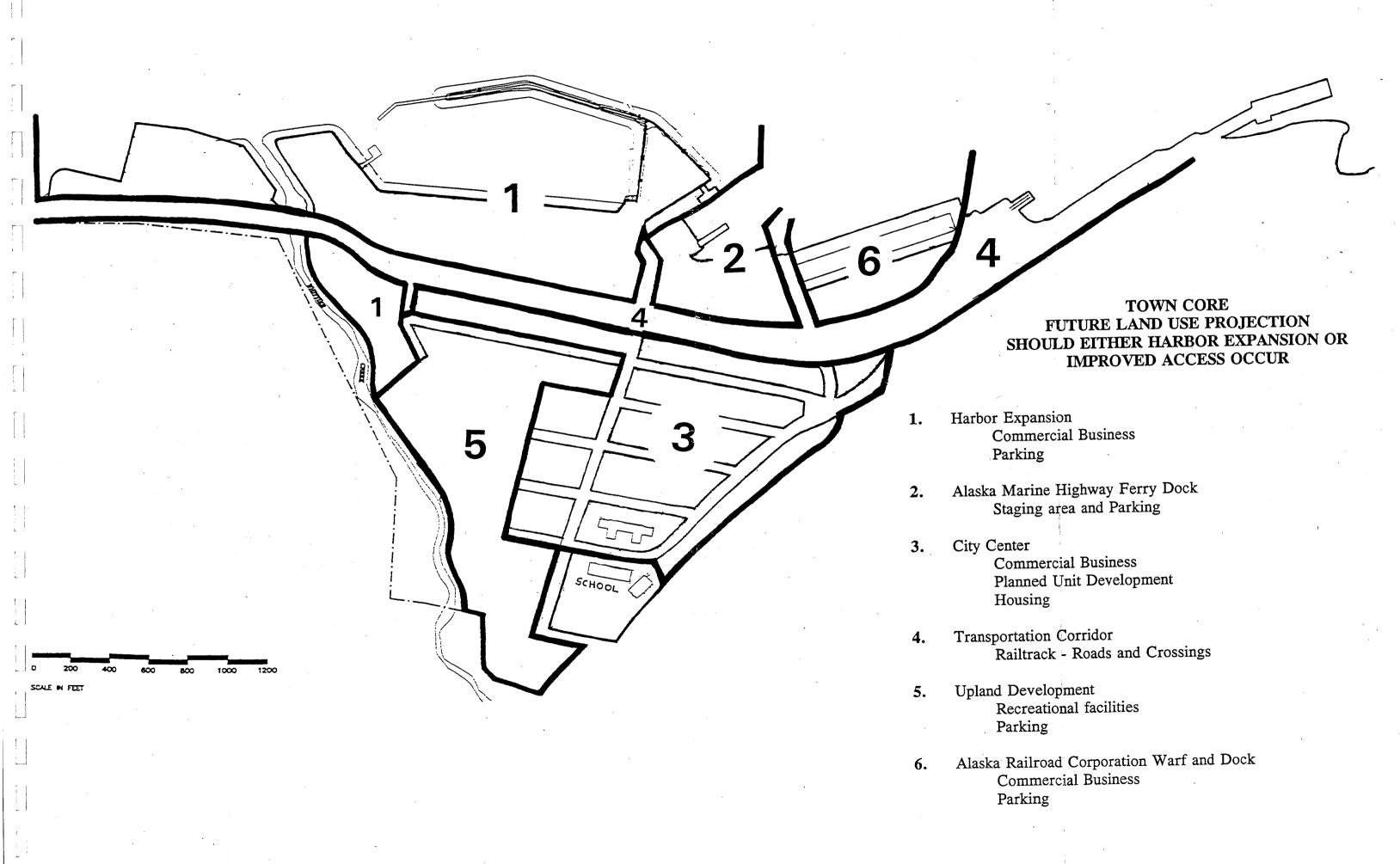
Highway Ferry Dock ea and Parking

lal Business Init Development

Corridor - Roads and Crossings

ment nal facilities

Corporation Warf and Dock al Business



APPENDIX A COMMUNITY SURVEY

WHITTIER FINAL TABULATION NUMERICAL RESULTS 100+ RETURNS

Comprehensive Plan Questionnaire December 1989

1. HOW OLD ARE YOU? Less than 18 7 18-24 5 5 25-34 35-50 28 51-62 22 63+ 20 2. OCCUPATION (Check all that apply) Unemployed Self-Employed 23 Government 24 _ City 10 State 2 Federal Alaska Rail Road 1 School District Employed by Private Business (includes BTI, Anchor Inn, Sportsman, TECOM, Crowley and others.) Fishing Full Time Fishing Part Time 6 Retired 16 Retired but work part time 4 Part time work 5 Do you operate a business at home. **YES 18** NO 67 Did you have employment related to the oil spill cleanup.

NO 73

YES 12

3. YEARS RESIDENT (Circle one)

Less than 1 9

1-2 10

3-5 14

6-8 10

9-10 0

>10 34

4. RESIDENCY (Circle one)

Whittier year around 41
Whittier part-time 18
Never or Short visits only 26

5. PROPERTY (Circle one)

Own a Condo 57
Rent or lease 31
Absentee Property Owner 8

6. AUTOMOBILES

How many vehicles do you keep in Whittier:

__ None 33
__ 1 29
__ 2 12
__ 3 or more 3

7. RANKING

What are the most important things for the City to support and encourage. Please rank the following in order of overall importance. One (1) is highest eleven (11) lowest. Use each number only once.

RESULTS ON SEPARATE SHEET

Small Business

Hotel/Rooms/ Places to stay

Future Camper Park Development with water and electricity and better signs so visitors can find the facilities.

Fish Unloading Dock and Associated facilities.

Fish Processing

More recreational facilities for tourists

Develop Ocean dock for Cruise Ships

Improve road access to second salmon run

Provide more City parking areas

Railroad Equipment Improvement such as flat cars and road bed reconstruction to improve ride.

8. TOURISM

Does the City need to develop a more friendly attitude toward visitors to town.

YES 7.4 NO 12

9. AIR QUALITY

Do you notice any outside air quality problems

Yes 10

No 68

Where do you live

Beaich Whittier Manor 49 19

Do you know the source:

10. HAZARDOUS MATERIALS

Do you feel there is a lack of preparation and readiness for a Hazardous Material spill in the Rail Road Yards.

YES 54

NO 19

Are you concerned about an oil spill at the tank farm.

YES 42 NO 39

Do you think the tank farm is ready and equipped to respond to a major oil spill.

YES 20 NO 46

11. SOLID WASTE DISPOSAL

The city is considering operating the rebuilt incinerator. Would you be willing to separate your garbage into combustible and non-combustible items.

YES 68 NO 15

Would you be willing to do more separation of your household waste for recycling.

YES 73 NO₈

12. HYDRO-ELECTRIC DEVELOPMENT

A proposal has been made to install a small Hydro Electric power plant on Whittier Creek. The plant would supply long term power at a fixed rate during the summer months. The power could be used to power the fish processing plants and to circulate the heating system water in Begich Towers (uses about 100 to 150 gallons of heating oil per day in the summer). Would you support this development if it was done in an environmentally safe and aesthetically pleasing fashion.

YES 66 NO 13

13. CITY SUBDIVISION LAND (Emerald Cove)

Should the City offer individual lots for sale <u>without</u> improvements such as water, sewer, electricity and roads.

YES 42 NO 41

Should the City offer individual lots for sale with provisions for utilities but no road connection with town.

YES 43 NO 40

Should the City sell the land in large lots to developers.

YES 28 NO 55

14. CITY PRIORITIES

Below are some items for the City to pursue. Please circle the top six.

- 57 Commercial development in harbor area.
- 49 Increase tourists and cruise ships.
- 48 Lower Access Fares.
- 46 Provide land for single family housing.
- Paving the low and high road around Whittier Manor.
- 42 Increase commercial boat moorage space.
- 41 Increase pleasure boat dock space.
- 29 Industrial development at head of the bay.
- 34 Future navy home port.
- 29 Increase charter boat moorage space.
- 28 Provide services to cruise ship crews.
- 20 Fire and police service and equipment.

15. RECREATION

Circle the following projects which you support city involvement in:

47 Ski/Sledding Area

- 45 Community Recreation Center
- 38 Teen Center
- 38 Beach Area
- 38 Sport Fishing Facilities
- 36 Community Swimming Pool
- 34 Open Gym on Weekends and in the Summer
- 22 Outdoor Basket Ball Area
- 21 Tennis Court
- 2 Go Kart Track

Would you be willing to:

- 61 Pay a user fee
- 3 Pay increased Taxes
- 8 Both

16. HEALTH

Has the community health service improved over the last two years.

YES 33 NO 21

What needs improvement:

Do you feel the community health service is under staffed in the summertime.

YES 39 NO 14

Do you feel the garbage dumpster in Begich Towers is a health hazard.

YES 32 NO 39

17. STATE FERRY

Should the state ferry make one trip a month between Whittier, Valdez and Cordova.

YES 64 NO 16

18. ALASKA RAIL ROAD

Is the rail shuttle service usually operated on time.

YES 27 NO 51

Should one of the two monthly turn around trains be rescheduled to run on the weekend.

YES 55 NO 18

Commercial vehicles pay significantly more per foot to travel on the shuttle. Should the tariff be adjusted to make the charges based on a flat fee per foot with no difference between commercial

and private vehicles.
YES 31 NO 50
19. PUBLIC SAFETY
Has the public safety department improved.
YES 33 NO 23 What needs improvement:
Do you believe that the public safety department has adequate equipment and personnel to meet the needs of the community.
YES 47 NO 15
What needs to be done:
20. CITY GOVERNMENT
Has the City office improved its operation.
YES 33 NO 28 What needs improvement:
Has the City boat harbor improved its operation.
YES 44 NO 16
What needs to be improved:
21. CITY BEAUTIFICATION
Should the City sponsor an annual clean up the town day.
YES 84 NO 1

Should the City provide funds for summer flower plantings and trees.

YES 62 NO 22

22. ACCESS

The state will be considering offering revenue bonds to build a road to Whittier from Portage. The principal and interest on these bonds will have to be paid for by the users of the road through a toll. The amount and duration (usually 30 to 50 years) of these bonds is not decided on. If a toll road was opened from Whittier to Portage how much will you be willing to pay as a toll one way for a passenger car with three people. Consider that these bonds will also cover

maintenance of the road.

\$5.00 18 \$10.00 44 \$25.00 14 \$30.00 3 \$40.00 1

23. OPPORTUNITY

As compared to these other areas of the state do feel Whittier has more or less opportunities.

Kenai	23	More	56	Less
Seward	19	More	59	Less
Anchorage	14	More	61	Less
Seldovia	39	More	40	Less

24. ANNEXATION

Annexation of lands into the City

From Shotgun Cove to Decision Point. YES 58 NO 19

Poe Bay and Billings Creek Areas (These areas are across Passage Canal) YES 42 NO 34

Should Whittier seek unification with Anchorage?

YES 31 NO 49

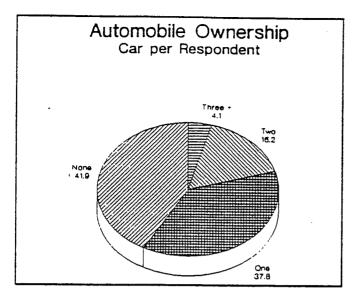
25. Should some developable areas outside the City core area be left in natural state for parks ?

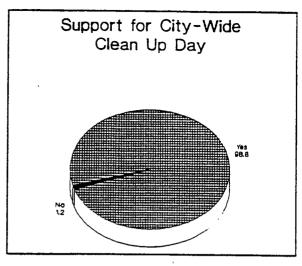
YES 68 NO 11

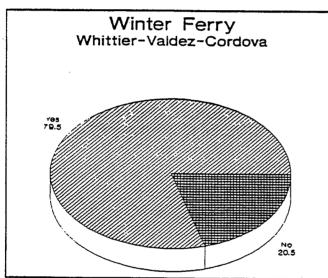
If Yes Please list:

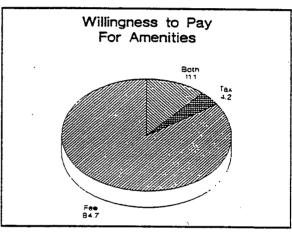
26. What is the most important single issue facing Whittier.

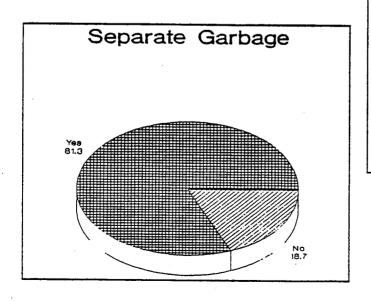
ROAD ACCESS CITY APPEARANCE DRUG AND ALCOHOL USE

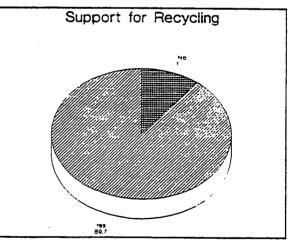


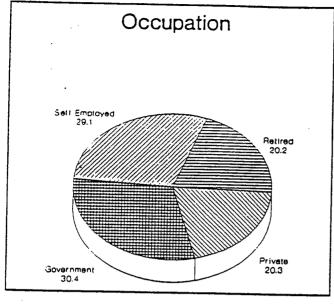


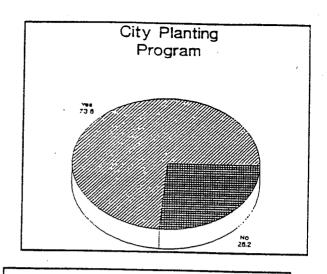


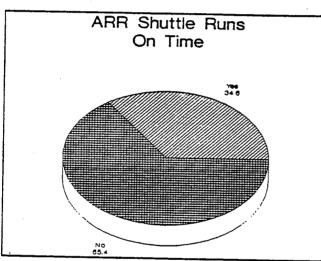


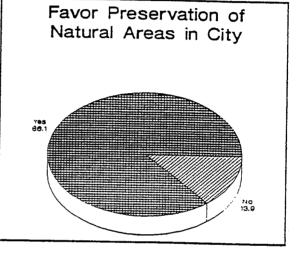


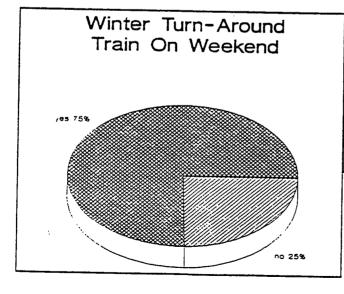


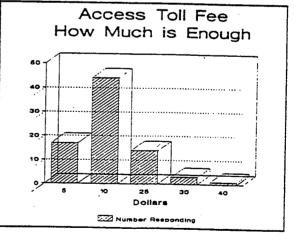












APPENDIX B MISCELLANEOUS DATA

WEATHER

The following table contains the mean temperature ranges and precipitation for each month. The data covers the year 1942-1973 and 1982-1987.

	MEAN TEMPERATURES		MEAN PRE	CIPITATION
	(degree	s)	(inches)	
Month	Max	Min	Rain	Snow
January	30.1	21.5	19.84	53.9
February	32.6	22.7	13.02	48.4
March	34.8	23.7	11.92	37.3
April	42.3	30.3	12.32	24.5
May	50.8	37.6	15.46	1.3
June	59.0	45.0	10.24	-0-
July	62.5	49.7	11.51	-0-
August	60.9	48.7	14.46	-0-
September	53.6	43.1	18.45	0.1
October	42.8	33.4	20.57	6.5
November	34.9	25.5	17.59	21.9
December	31.5	22.1	23.80	<u>57.4</u>
Total	,		189.18	251.3

	TOTAL PRECIPITATION	TOTAL SNOWFALL
YEAR	(inches)	(inches)
1983	205.7	133.6
1984	218.6	168.3
1985	255.7	270.1
1986	269.7	266.2
1987	316.8	265.8
1988	262.6	347.4
1989	225.1	191.9
1990	169.1	259.1
1991	228.5	252.1
1992	205.6	230.4
1993	201.6	183.9

EXTREME TEMPERATURES

	RECORD		RECORD	
MONTH	HIGH	YEAR	<u>Low</u>	YEAR
January	54	1963	-11	1952
February	53	1943	-15	1943
March	54	1954	-10	1944
April	63	1942	- 2	1944
May	76	1949	15	1945
June	82	1944	29	1945
July	88	1966	34	1959
August	87	1957	34	1943
September	73	1957	23	1957
October	71	. 1957	0	1970
November	56	1957	-17	1969
December	48	1983	-29	1942

The following U.S. census State Department of Labor and State munixipal revenue sharing figures identify the creases and decreases in Whittier's population.

YEAR	POPULATION	YEAR	POPULATION
1950	627	1985	338
1960	809	1986	335
1970	130	1987	333
1980	198	1988	333
1981	211	1989	299
1982	229	1990	243
1983	263	1991	278
1984	273	1992	294
		1993	271

BUSINESS LICENSES

The following is the number of business licenses issued by the City.

YEAR	# OF BUSINESS LICENSE ISSUED	YEAR	# OF BUSINESS LICENSE ISSUED
1984	60	1989	59
1985	63	1991	57
1986	57	1992	60
1987	67	1993	69
1988	65	1994	88

FERRY DATA STATE FERRY BARTLETT

These figures are from the state Department of Transportation and Public Facilities.

1988		Jan	Feb	Mar	Apr	May	Jun
Passenger	North	431	334	598	851	851 5038	
	South	418	354	684	997	4984	13635
	Total	849	688	1282	1848	10022	25290
Vehicle	North	209	190	265	498	1279	1981
	South	206	213	274	523	1266	2183
	Total	415	403	539	1021	2545	4164
·							
1989		Jan	Feb	Mar	.Apr	May	Jun
Passenger	North	483	541	785	1144	3562	12867
	South	460	497	812	1304	3865	13841
-	Total	943	1038	1597	2448	7427	26708
Vehicle	North	215	226	345	460	926	1923
	South	216	210	343	533	1067	2034
	Total	431	436	688	993	1993	3957

1988		Jul	Aug	Sep .	Oct	Nov	Dec
Passenger	North	17657	17967	5394	776	727	526
	South	18844	17935	5883	845	605	578
	Total	36501	35902	11277	1621	1332	1104
Vehicle	North	2510	2407	979	433	307	327
	South	2397	2352	922	430	318	282
	Total	4907	4759	1901	863	625	609
·····							
1989		Jul	Aug	Sep	Oct	Nov	Dec
Passenger	North	18202	15575	7404	1123	629	583
	South	17829	16630	6715	950	644	612
	Total	36031	32205	14119	2073	1273	1195
Vehicle	North	2361	2191	1523	677	387	334
	South	2388	2235	1328	669	413	332
	Total	4749	4426	2851	1346	800	666

Link 19	Passeng 990 Coun		Passenger Capacity Ratio*	Vehicle Count	Vehicle Miles	Vehicle Capacity Ratio*	sqhT	Link Length	Vestol Miles
Cordova-Valdez	4,2	45 314,130	16.8%	1,449	107,226	30.1%	120	74	8,830
Valdez-Cordova	4,5	72 938,328	18.1%	1,796	132,904	37,4%	120	74	8,830
Valdez-Whittier	8,7	37 681,486	50.1%	2,234	174,252	67.2%	. 83	78	6,474
Whittier-Valdez	9,1		• •	2,234	174,252	67.2%	83	78 ·	6,474
	 	 	VII.370	` ——	-	0,274	ω	20	01454
TOTALS	26,6	81 2,045,850		7,713	588,634				39,708
Link 1	991 Passeng Count		Passenger Capacity Ratio*	Vehicle Count	Vehicle Miles	Vehicle Capacity Ratio*	eqhT	Link Length	Veusol Müvs
_Cordove-Valde	3,6	188 272,912	19.2%	1,260	93,240	34.6%	91	74	6,734
Cordova-Whittie	1	90,792		341	33,077	50.1%	17	97	1,649
Valdez-Cordova	3,8	965 286,010	20.4%	1,535	113,590	42.6%	90	74	6,660
Valdez-Whittler	9,9	38 775,164	55.6%	2,555	199,290	75.1%	85	78	6,630
Whittier-Cordov	ra 1,0	96 106,312	30.7%	381	36,957	56.0%	17	97	1,649
Whittier-Valdez	9,7	27 758,706	54.4%	2,268	176,904	66.7%	85	78	6,630
TOTALS	29,2	50 2,289,896		8,340	659,058		1	•	29,952
Link 19	Passeng 192 Count	,	Passenger Capacity Ratio*	Vehicle Count	Vehicle Miles	Vehicle Capacity Ratio*	Luita	Link Length	V see al Miles
Cordova-Valdez	32	289 243386	15.3%	1050					
Cordova-Whittier	1	343 130271		1,050 435	77700	25.7%	102	74	7,548
Valdez-Cordova	i i	108 252192		1,251	42195 92574	27.1%	40	97	3,830
Valdez-Whittier	8,7			2,244	175032	30.6%	1(2	74	7,546
Whittier-Cordova	1,3	310 127070		432	41904	68.4% 27.6%	85	78 07	6,396
Whittier-Valdez	8,8			2,069	161382	60.8%	39 85	9 7 78	3,783 6,630
TOTALS	26,9	2,126,265		7,481	590,787	00.076	65	, , , , , , , , , , , , , , , , , , ,	6,630
				7,4.					35 ,785
Link	Passeng 1993 Count	ger Passenger t Miles	Passenger Capacity Ratio*	Vehicle Count	Vehicle Miles	Vehicle Capacity Ratio*	•		issel iles
Cordova-Valde	- , ,,,	79 331,446	16.50%	1,440	106,560	27.90%	129	74	9,5:6
Cordova-Whitti	}	03 126,391	15.50%	448	43,456	28.00%	40	97	3,830
Valdez-Cordov	- 1 ","	62 337,588	16.70%	1,588	117,512	30.50%	130	74	9,6:30
Valdez-Whittier	, ,,,	•	50.60%	2,103	164,034	66.50%	79	78	6,1:32
Whittier-Cordo			16.60%	443	42,971	27.60%	40	97	3,830
Whittier-Valdez	8,4	53 659,334	50.90%	2,047	159,666	64.70%	79	78	6,162
TOTALS	28,6	01 2,246,071		8,069	634,199				39,250
Link 1994	Passenger Count	Passenger Miles	Passenger Capacity Ratio*	Vehicle Count	Vehicle Miles	Vehicle Capacity Ratio*	Trips	Link Length	Vessel Miles
Cordova-Excursion	81	0	38.50%	0	0	0.00%	1	,	. ^
Cordova-Valdez	4,955	366,670	18.20%	1,437	106,338		i		_
Cordova-Whittier	1,115	108,155	11.60%	-		36.70%			•
Valdez-Cordova	•	-	i	409	39,673	33.25%	ŀ		•
Valdez-Whittier	4,938	365,412	18.00%	1,618	119,732	41.10%			-,
1	8,435	657,930	50.20%	2,144	167,232	77.80%	1		6,240
Whittier-Cordova Whittier-Valdez	1,091 8,673	105,827 676,494	12.30% 50.90%	378 2,037	36,666 158,886	27.90% 72.40%	1		•
TOTALS	29,288	2,280,488	•	8,023	628,527	•			39,969

APPENDIX C

RESULTS OF COMPREHENSIVE PLAN 1994 QUESTIONNAIRE Whittier Resident Responses

- 1) AGE The bulk of respondents were over the age of 35.
- 2) RESIDENCY While more respondents had been in Whittier either less than three years but more than eight years, the cluster of residents had been here between three and eight years.
- 3) HOME OWNERSHIP 14 respondents owned a condo at BTI, 5 at whittier Manor. 15 other rented or, presumably, lived on a boat.
- 4) RANKING THE FUTURE In ranking what is important for the future of Whittier respondents were overwhelmingly in favor of large scale development objectives. They ranked expansion of the small boat harbor, road access, marginal wharf development and redevelopment of the core area in that order.
- 5) ECONOMIC DEVELOPMENT Both Whittier residents and non-residents were overwhelmingly in favor of tourism related economic development. They were evenly split on the question regarding attitudes of city council and local residents toward visitors.
- 6) LAND DEVELOPMENT On the subject of development of Emerald Cove and Shotgun Cove respondents were in favor of selling the land in lots without utilities or road connections.
- 7) CITY PRIORITIES Respondents ranked city priorities in the following order:
 - 1. Enlarge small boat harbor
 - 2. Attract cruise ships
 - 3. Improve access (Road by 2-1 margin)
 - 4. Improve public safety/EMS
 - 5. Encourage tourism
- 8) RECREATION Respondents carried their interest in economic development in answering questions about what recreational project they wished to see pursued:
 - 1. Trails
 - 2. Sport fishing facilities
 - 3. Community recreation center
 - 4. Camping facilities near Whittier Creek

- 9) HEALTH On health issues the respondents said they did not favor subsidizing medical services, felt confidentiality was a problem in the clinic, did not feel the EMS was able to meet residents needs and by a two vote margin felt that a weekly visit by a doctor would meet their needs. However, in chossing between a physician or a physician's assistant respondents overwhelming support a PA.
- 10) SHUTTLE Respondents were nearly unanimous on the question of whether the Whittier shuttle operates on time but almost half did not think the shuttle should run more often in the winter. By a narrow margin respondents felt shuttle rates should be adjusted and no distinction should be made between commercial and non-commercial uses.
- 11) PUBLIC SAFETY By more than a 3 to 1 margin respondents believe current police services meet their needs and that the service is adequately staffed and outfitted.
- 12) CITY SERVICE By nearly a 2 to 1 margin respondents believe the City provides adequate service; that volunteer EMT's should not be compensated. But, a large percentage said the small boat harbor does not meet their needs or is not properly maintained.
- 13) BEAUTIFICATION Respondents overwhelmingly supported current beautification efforts such as planting trees and shrubs.
- 14) BOROUGH GOVERNMENT On the subject of governance, respondents, by a 19-10 margin, wanted the City to remain independent. If merger with a borough were to occur the preference was clearly with a Prince William Sound Borough. By a large margin respondents said they would be willing to pay more taxes to remain independent.
- 15) THREE MOST IMPORTANT ISSUES Amoung the three more important issues facing resident the respondents said:
 - 1. Improved Access
 - 2. Economic Development
 - 3. Small boat harbor development

TABLUATION OF RESIDENT RESPONSES TO 1994 COMPREHENSIVE PLAN QUESTIONNAIRE

1.	HOW OLD ARE YOU?
	Less than 18 1
	18 to 24 0
	25 to 34 2
	35 to 50 19
	51 to 62 8
	63 and over 5
	os and over
2.	OCCUPATION (CHECK ALL THAT APPLY)
	Unemployed 3
	Self-employed 3
	Government
	City 5
	State 0
	Federal 1
	ARRC 2
	School
	Employed by Private Business 9
	Fishing Full Time 4
	Fishing Part Time 5
	Retired 3
	Retired but works part time 1
	Part Time work 5
**	Do you operate a business at home YES 4 NO 11
	Otherwise employed YES 5 NO 4
_	
З.	RESIDENCY
	Are you an Alaska resident? YES 35 NO 0
4.	YEARS RESIDENT IN WHITTIER
.	If you are a Whittier resident, how many years?
	Less than 1 4
	1 to 2 5
	3 to 5 8
	6 to 8 7
	9 to 10 1
	10 to 15 3
	15 or more 7
5.	LIVING AND PROPERTY IN WHITTIER
J.	
	Own a Condo at Whittier Manor 5
•	Own land in Whittier 1
	Rent or Lease Condo at BTI 7
	Rent or Lease Condo at Whittier Manor 3
	Rent or Lease land in Whittier 0
	None of the above 5

6. AUTOMOBILES

How many vehicles do you keep in Whittier? 66

Do you keep them in Whittier seasonally or full time? 6 sea

2 FT

7. BOATS

How many boats do you keep in Whittier? 20
Do you keep it/them in the small boat harbor?YES 14 NO 4
How often do your use your boat?

Daily 3 Weekly 8 Monthly 1 Rarely 5

8. RANKING THE FUTURE

WHAT ARE THE MOST IMPORTANT THINGS FOR THE CITY OF WHITTIER TO SUPPORT AND ENCOURAGE. ONE (1) BEING THE LOWEST, TEN (10) BEING THE HIGHEST.

- 48 Keep Whittier as it is, no change
- 179 Small Business development
- 150 Camper Park development
- 191 Docks and associated facilities for fishermen and tour boats
- 141 More recreational facilities for residents. (Trails, Parks, etc)
- 152 More recreational facilities for tourists.
- 187 Develop Marginal Wharf and Transit Shed for Cruise Ships and Tourism economy.
- 216 Small Boat Harbor expansion
- 173 Redevelopment of core area to provide more business establishments and single family housing.
- 121 Improved road access to first Salmon Run with better park facilities.
- 109 Improved road access to second Salmon Run with subdivison, park facilities and parking area.
- 124 Shotgun Cove Road
- 126 Shotgun Cove Development
- 169 Move railroad from the center of town to provide new development opportunities
- 131 Provide more City park areas.
- 193 Improve Access to Whittier.

Which access alternative do you prefer?

- 0 No Change
- 9 Improved Rail Shuttle
- 23 Road from Portage to Whittier

9. TOURISM

- 1. Based on a projected high volume of visitors coming to Whittier if access is improved, do you favor tourism related economic development in the community?

 YES 33 NO 2
- 2. Do you feel the attitude and actions of the City and its residents encourages visitors to return? YES 14 NO 15

Appendix C page 4

10. HAZARDOUS MATERIALS

Are you concerned about the use of Hazardous Materials and readiness for a Hazardous Material spill in:

The City of Whittier? YES 20 NO 9
The U.S. Tank Farm at
Head of the Bay? YES 19 NO 11

Should the City government step up its role to secure committments from shippers to protect city residents and visitors?

YES 24

NO 11

11. SOLID WASTE DISPOSAL

The City of Whittier is in the middle of a trial period with Peninsula Sanitation for refuse removal. The trial period will end on June 30th.
 On a scale of 1 thru 10 with 10 being highest, how would you rate the service so far? (Circle only one)

1 2 3 4 5 6 7 8 9 10 Responses 1 0 2 3 3 1 5 9 2 5

- 2. If it would keep cost down would you be willing to do more separation of your household waste for recycling? YES 32 NO 2
- 3. Would you be willing to pay more taxes for a new waste incinerator that would generate heat for a Health Spa/Community Swimming Pool/Recreation Center?

 YES 16 NO 16
- 12. CITY SUBDIVISION LAND (Emerald Bay and Shotgun Cove)
 - 1. Should the City of Whittier offer individual lots for sale without improvements such as water, sewer, electricity and roads?

 YES 20 NO 13
 - 2. Should the City of Whittier offer individual lots for sale with provisions for utilities but no road connection with town?

 YES 14

 NO 19
 - 3. Should the City of Whittier sell the land in large lots to developers? YES 13 NO 17
 - 4. Should the City of Whittier finance the sale of these lands?
 YES 12 NO 19

13. CITY PRIORITIES

Below are some items for the City of Whittier to pursue. (Please check the five most important)

- 30 1. Increase size of the harbor
- 19 2. Encourage increased tourism
- 11 3. Provide land for housing
- 27 4. Improved access to Whittier
- 3 5. Install security fence around Buckner Building
- 5 6. Develop park area in Smitty's Cove
- 21 7. Improved public safety/emergency medical service
- 5 8. Improve Search and Rescue service
- 15 9. Encourage industrial development to occur at Head of the Bay.
- 28 10. Attract cruise ships to utilize Whittier as a Port of Call.

TOP FIVE MOST IMPORTANT

- #1 Increase size of the harbor
- #2 Attract cruise ships to utilize Whittier as a Port of Call
- #3 Improved access to Whittier
- #4 Improved public safety/emergency medical service
- #5 Encourage increased tourism

14. RECREATION

Check the following recreation projects which you want the City of Whittier to support and develop:

- 23 1. Improved trails around Whittier
- 16 2. More camping facilities along Whittier Creek
- 12 3. Winter time outdoor hockey rink/skating rink
- 12 4. Ski/sledding area
- 15 5. Community recreation center
- 12 6. Teen center
- 12 7. Community Spa
- 12 8. Improved beach area
- 18 9. Sport fishing facilities
- 15 10. Community swimming pool
- 13 11. Open gym on weekends and in summer
- 11 12. Improved outdoor basketball area
 - 6 13. Baseball diamond
 - 8 14. Tennis courts

TOP FIVE MOST WANTED

- #1 Improved trails around Whittier
- #2 Sport fishing facilities
- #3 More camping facilities along Whittier Creek
- #4 Community swimming pool
- #5 Community recreation center

In order to pay for the above, would you be willing to: 14-Pay a user fee 2-Pay increased taxes 13-Both 3-Neither

15. HEALTH

- 1. Should the City of Whittier subsidize medical services?
 YES 12 NO 17
- Do you feel that confidentiality is a problem in the Whittier Medical Clinic? YES 14 NO 16
- 3. Do you feel the Whittier's EMS Program can meet the needs of the city?
 YES 15 NO 17
- 4. If the City of Whittier were to hire a Doctor to come in once a week in the summer and twice a week in the winter would this suit your medical needs?

 YES 16 NO 14
- 5. Would you prefer a Doctor available on that schedule or a physician's assistant on a more frequent basis? Doctor - 10 Physician's Assistant - 22

16. STATE FERRY

- Do you feel that the state ferry system should operate between Whittier, Cordova and Valdez in the winter months? YES 17 NO 14
- 2. If you said yes to the above, how many trips per month would you like to see?

 5 Average
- 3. How often would you use the service? 1.25 Average
- 4. Have you been on the ferry in the past 2 years? YES 12 NO 21 How many times? 2.25 Average

17. ALASKA RAILROAD

- 1. Is the Whittier shuttle service usually operated on time?
 YES 29 NO 1
- 2. Do you feel the shuttle service should run more often in the winter months? YES 21 NO 10
- 3. Commercial vehicles pay significantly more per foot to travel on the shuttle. Should the tariff be adjusted to make the charges based on a flat fee per foot with no difference between commercial and private vehicles? A 60 foot container with a tractor/trailer costs \$1070 per round trip.

YES 15 NO 12

4. Last year the railroad offered walk on service on all shuttle trains. Do you feel this helps with your transportation needs?

YES 23 NO 8

18. PUBLIC SAFETY

- Does the City's police force meet your needs?
 YES 24
 NO 7
- 2. Do you believe that the public safety department has adequate equipment and personnel to meet the needs of the community? YES 19 NO 11

19. CITY GOVERNMENT

- 1. Does the City provide adequate services? YES 18 NO 7
- 2. Do you feel EMT's, Fire Persons and other volunteers for the City should be compensated?

 YES 8 NO 22
- 3. Does the Whittier Small Boat Harbor meet your needs?
 Is it adequately maintained?
 YES 14 NO 17

20. CITY BEAUTIFICATION

- Should the City of Whittier provide funds for summer flower planting and trees?
 YES 21 NO 9
- 2. Do you support more beautification projects like that which recently occured in the Triangle?

 YES 21 NO 4

21. GOVERNMENT

- Should Whittier remain an independent City or merge with a borough government?
 Remain independent 19 Merge with a borough 10
- 2. If the City of Whittier were to merge into a Borough Government which would you prefer:
 - 7 1. Municipality of Anchorage
 - 3 2. The Kenai Peninsula Borough
 - 18 3. A Prince William Sound Borough
- 3. If you want the City to remain independent, are you willing to pay more taxes than you pay today to support that government?

 YES 17 NO 7

BIBLIOGRAPHY

- Billings Glacier Molybdenum-Copper Occurrence, Bureau of Mines open file report, 1981.
- Coastal Management Plan, City of Whittier, 1989.
 Also contains a list of references. Much detail on biphysical attributes of the area.
- Comprehensive Area-Wide Water and Sewer Plan, Thiel and Assoc. 1974.
- Comprehensive Plan, City of Whittier, 1990.
- Comprehensive Plan,
 Department of Community and Regional Affairs (DCRA),
 April 1986.
- Comprehensive Plan, Tryck, Nyman and Hayes, 1974.
- Economic Potential of Alaska Military Surplus Property,
 Office of the Governor, the Doxiadis System 1970.
 Recommends that the State acquire all surplus property at
 Whittier to develop a state park.
- Effects of the Earthquake of March 27, 1964 at Whittier, Alaska, U.S. Geological Survey Professional paper 542-B, 1965.
- Electrical Power for Whittier Alaska, E.I.S., FERC Project No. 10064-000, W.J. Latham.
- International Tourism and Resort Advisors Reports (INTRA),
 City of Whittier Redevelopment and Urban Design Plan, 1994,
 Destination Resort Development at Shotgun Cove, 1993.
- Land Use Plan for Small Boat Harbor, Whittier, Alaska,
 Alaska Department of Transportation and Public Facilities by
 U.S.K.H. Inc. 1985.
- Planning Study for a Small Boat Harbor at Whittier, Alaska, Alaska Department of Public Works, 1969.
- Transportation Study Alternative, Bear Valley Link, R.A. Kreig and Assoc., 1982.
- Whittier Access,
 DOTPF by DMJM Forssen, 1980.

Whittier Access Project,
Draft Environmental Impact Statement, 1995
3 Volumes: Draft Section 4f Evaluation
Supplemental Technical Reports
Appendices A-E.

Whittier - Anchorage Pipeline, U.S. Department of the Army, 1968.

Whittier Transportation Options Study, DMJM Forssen, 1981.

Whittier Water Study, Preliminary Engineering Evaluation, CRW Engineering Group, April 1990.